



MAHSO
MARKET AREA HEALTH SYSTEMS OPTIMIZATION

VISN 10 MichErie Market Data Discovery & Findings

Submission to VISN Leadership
October 4, 2019



VISN 10: MichErie Market

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Overview



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Overview ► **Document Purpose**

The Data Discovery & Findings (DD&F) deck is a standardized collection of data that will be used across market assessments to understand important aspects of each market. It is similar to the deck that was presented during previous VHA Office of Policy and Planning (OPP) market assessment trainings and will be used to develop key findings and inform the development of opportunities to create high-performing networks of care.

Data is pulled from a wide range of VA and commercial sources, and each slide cites the relevant data source.

The DD&F is one piece of the overall market assessment process. The assessments will also be informed by review of local data and site visits to ensure that both qualitative and quantitative data are considered. No single data point will be used as the deciding factor in determining opportunities for the market.



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Overview ► **Assumptions**• **VA Data & Analysis**

- ✓ All VA data was extracted and provided by VA for use in the DD&F.
- ✓ When there were discrepancies between data obtained from local sources and data obtained from national sources, national sources were used.
- ✓ In various places throughout the deck, there are mappings to translate data between different data types (e.g., HSPP, bed sections, stop codes, specialty, services lines, CPTs, DRGs, etc.). These mappings were provided by the Office of Policy & Planning (OPP) and implemented to aggregate or categorize data for display in the slides. It also allows for a better programmatic view of care.
- ✓ Treating facilities that have a parent in a different market are displayed in both the treating facility market and the parent market.
- ✓ Enrollee Health Care Projection Model (EHCPM) citations include a combination of market-based and facility-based projections. These two projection model views are different, and the numbers are not intended to match.
- ✓ EHCPM data for the year 2017 is pulled from the “Actuals” databases instead of the projected year 2017.
- ✓ The facilities contained within the DD&F are based on the Facility Hierarchy file provided by OPP. Any data for facilities not in this file are not included in the DD&F. Additionally, the facility market, county, parent, and name are found within this file.
- ✓ The market hierarchy geography used to create the DD&F is from the BY17 EHCPM. All VISN/Market/County mappings are based off of this geography.
- ✓ Numeric values of data throughout the DD&F are rounded.
- ✓ Office of Community Care data was obtained using the Program Integrity Tool. This data may have anomalies, gaps, and missing values due to various methods of processing Choice data within the last several years. Any identified gaps were addressed with reasonable logic wherever possible; however, errors may remain.
- ✓ For maps, any site of care deactivated in VAST after July 18, 2019 will not be reflected.
- ✓ For workload trending purposes, slides may contain facilities that are deactivated, if they had workload in FY16, FY17 or FY18.
- ✓ Planned sites of care are not included on maps unless specifically requested and justified.



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Overview ► **Assumptions, cont.****• Commercial Market Data & Analysis**

- ✓ The commercial market capacity assessment considers only reported physical capacity and does not incorporate: 1) ability to staff patient care services or accept VA patients; 2) length of time to change facilities to accommodate Veteran demand; and 3) any negotiations for specific rates for care provided in the community.
- ✓ Pediatric healthcare was not considered.
- ✓ IBM Market Expert FTE estimated demand is based on a median provider productivity level by service line.
- ✓ The 10 year commercial workload estimates are based on the 10 year IBM/Watson Health Market Expert projections straight-lined through 2028.
- ✓ Community hospitals within a 60 minute drive time of the VAMC's zip code were the primary focus for assessment and used as a comparison to each VAMC.
- ✓ Due to differences in hospitals' cost reporting periods, FY18 CMS Cost Report data was used when available and FY17 CMS Cost Report data was used when FY18 data was not available.

• Quality

- ✓ Differences in quality metrics between VA and widely accepted commercial benchmarks introduce significant subjectivity.

• Cost Analysis and Recommendations

- ✓ This is a high-level cost analysis. It compares three data points: internal VA cost to provide care to Veterans, potential cost to acquire the same care in the market at Medicare rates, and existing experience with purchase of Non-VA care as applicable.
- ✓ Adjusted total cost by DRG as well as non-VA purchased care paid by DRG was provided by VA.



Demographics ► **Market Geography and Demographics**



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Demographics ► Existing VA Market and Facility Hierarchy

MARKET CODE	MARKET NAME	2017 MARKET ENROLLEE POPULATION	SUBMARKET CODE	SUBMARKET NAME	2017 SUBMARKET ENROLLEE POPULATION	MEDICAL CENTER NAME	SECTOR CODE	SECTOR ENROLLEE 2017 POP	PROJECTED SECTOR ENROLLEE 2027 POP	SECTOR CHANGE RATE 2017-2027	EXISTING FACILITY NAME	EXISTING FACILITY TYPE				
10-j	(V10) Eastern Michigan	112,551	10-j-2	V10 East Mich Southeast	87,944	(V10) (506) Ann Arbor	10-j-2-A	12,691	13,547	6.7%	(V10) (506GB) Flint	Primary Care CBOC				
10-i	(V10) MichErie	108,204	10-i-3	V10 ME Southeast	40,620		10-i-3-A	5,773	5,661	-1.9%	(V10) (506GC) Jackson-Michigan Center	Multi-Specialty CBOC				
							10-i-3-B	11,674	11,906	2.0%	(V10) (506) Ann Arbor	VA Medical Center (VAMC)				
											(V10) (506QA) Ann Arbor-Packard Road	Other Outpatient Services (OOS)				
											(V10) (506QB) Green Road	Other Outpatient Services (OOS)				
											(V10) (506GA) Toledo	Multi-Specialty CBOC				
						10-i-3-E	5,016	4,962	-1.1%							
			10-i-1	V10 ME Northwest	14,953	(V10) (655) Saginaw	10-i-1-A	4,212	4,293	1.9%	(V10) (655GA) Gaylord	Multi-Specialty CBOC				
							10-i-1-B	5,957	6,096	2.3%	(V10) (655GH) Cheboygan County	Primary Care CBOC				
											(V10) (655GI) Grayling	Primary Care CBOC				
											(V10) (655GB) Traverse City	Primary Care CBOC				
											(V10) (655QB) Grand Traverse	Other Outpatient Services (OOS)				
							10-i-1-C	4,784	5,013	4.8%	(V10) (655GG) Cadillac	Multi-Specialty CBOC				
											10-i-2-A	5,551	5,578	0.5%	(V10) (515GA) Muskegon	Primary Care CBOC
											10-i-2-B	5,244	5,635	7.5%		
10-i-2-C	6,791	7,123	4.9%													
10-i-2-D	11,957	12,049	0.8%	(V10) (515BY) Wyoming	Multi-Specialty CBOC											
				(V10) (515QB) Century Avenue-Grand Rapids	Other Outpatient Services (OOS)											
				10-i-2-E	9,724	10,084	3.7%	(V10) (515GB) Lansing South	Primary Care CBOC							
				(V10) (515QA) Lansing North	Other Outpatient Services (OOS)											
10-i-2-F	13,364	13,537	1.3%	(V10) (515) Battle Creek	VA Medical Center (VAMC)											
10-h	(V10) Indiana	137,970	10-h-1	V10 Ind Northwest	19,426		10-h-1-A	5,975	5,627	-5.8%	(V10) (515GC) Benton Harbor	Primary Care CBOC				

Source: 1. BY17 EHCPM 2. FY18Q4 VAST

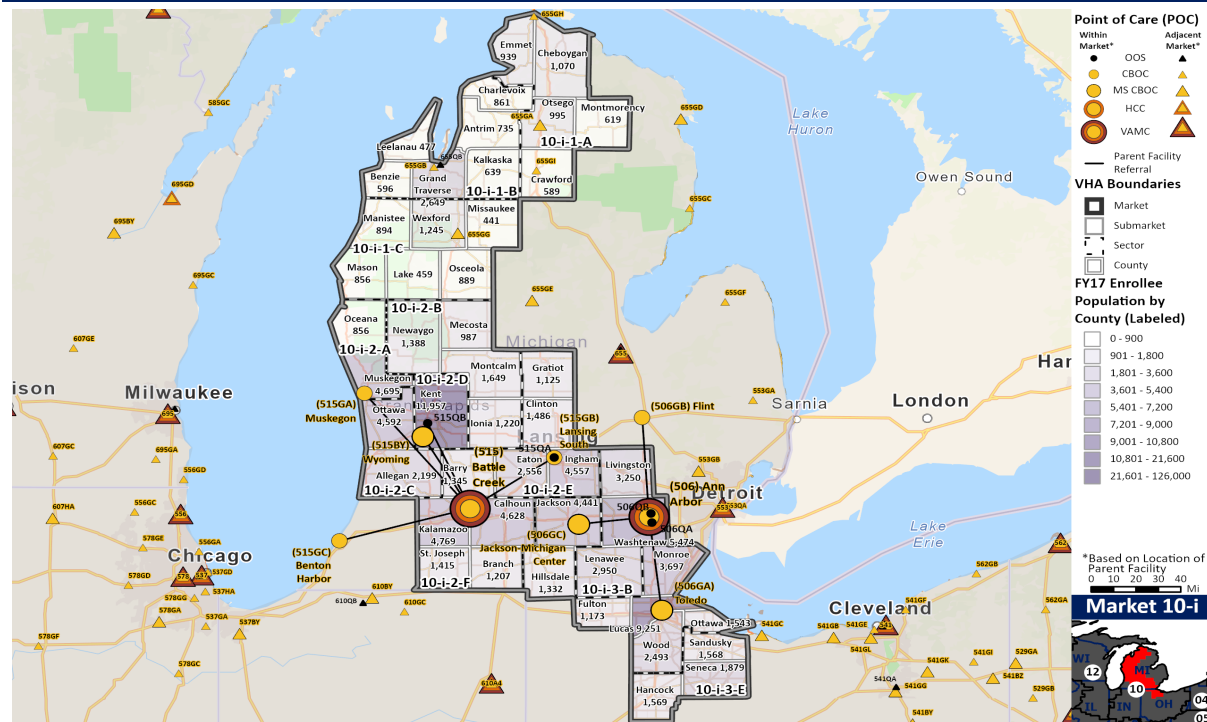
Note: Mobile sites are not listed



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Demographics ► Market Overview

Existing VHA System



Key Market Statistics

Total 2017 Enrollee Population: 108,199

• Top Counties by Enrollee Population:

- Kent, MI: 11,957
- Lucas, OH: 9,251
- Washtenaw, MI: 5,474

• Total Enrollees: 35th of 96 markets

- Estimated 10-Year Enrollee Change: 2.1%
- 37th of 96 markets

Total 2017 Eligible Veteran Population: 198,888

- -21.8% estimated 10-Year Eligible Veteran Population Change

2018 Core Uniques:* 77,168**VAMC:**

- (V10) (506) Ann Arbor-Michigan
- (V10) (515) Battle Creek

*Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.



VISN 10: MichErie Market

Demographics ► Market Enrollee Demographics

County-Based Enrollee Projections						
County	Sector	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
Cheboygan, MI	10-i-1-A	1,070	1,089	1.79%	918	-14.27%
Otsego, MI	10-i-1-A	995	991	-0.36%	825	-17.03%
Emmet, MI	10-i-1-A	939	974	3.77%	805	-14.22%
Crawford, MI	10-i-1-A	589	634	7.51%	530	-10.03%
Montmorency, MI	10-i-1-A	619	605	-2.22%	502	-18.82%
Sector Subtotal	10-i-1-A	4,212	4,293	1.93%	3,581	-14.99%
Grand Traverse, MI	10-i-1-B	2,649	2,691	1.59%	2,314	-12.62%
Charlevoix, MI	10-i-1-B	861	867	0.70%	729	-15.27%
Antrim, MI	10-i-1-B	735	742	0.99%	627	-14.57%
Kalkaska, MI	10-i-1-B	639	663	3.87%	570	-10.78%
Benzie, MI	10-i-1-B	596	622	4.40%	523	-12.21%
Leelanau, MI	10-i-1-B	477	511	7.12%	423	-11.32%
Sector Subtotal	10-i-1-B	5,955	6,095	2.36%	5,187	-12.90%
Wexford, MI	10-i-1-C	1,245	1,295	4.04%	1,106	-11.14%
Manistee, MI	10-i-1-C	894	968	8.26%	826	-7.63%
Osceola, MI	10-i-1-C	889	929	4.44%	786	-11.62%
Mason, MI	10-i-1-C	856	890	4.01%	755	-11.75%
Lake, MI	10-i-1-C	459	477	3.78%	408	-11.11%
Missaukee, MI	10-i-1-C	441	454	2.94%	395	-10.49%
Sector Subtotal	10-i-1-C	4,784	5,012	4.77%	4,276	-10.62%

Note: Market totals do not exactly match following slides due to rounding by county within EHCPM.

Source: BY17 EHCPM VetPop & Enrollment

1.3.V10.MichErie



VISN 10: MichErie Market

Demographics ► Market Enrollee Demographics, cont.

County-Based Enrollee Projections						
County	Sector	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
Muskegon, MI	10-i-2-A	4,695	4,696	0.02%	4,110	-12.45%
Oceana, MI	10-i-2-A	856	882	3.10%	779	-9.03%
Sector Subtotal	10-i-2-A	5,551	5,579	0.50%	4,889	-11.93%
Montcalm, MI	10-i-2-B	1,649	1,774	7.52%	1,595	-3.28%
Newaygo, MI	10-i-2-B	1,388	1,528	10.09%	1,359	-2.04%
Ionia, MI	10-i-2-B	1,220	1,242	1.80%	1,110	-8.97%
Mecosta, MI	10-i-2-B	987	1,091	10.45%	958	-2.96%
Sector Subtotal	10-i-2-B	5,244	5,633	7.42%	5,023	-4.22%
Ottawa, MI	10-i-2-C	4,592	4,816	4.88%	4,269	-7.03%
Allegan, MI	10-i-2-C	2,199	2,307	4.90%	2,038	-7.32%
Sector Subtotal	10-i-2-C	6,791	7,123	4.89%	6,307	-7.13%
Kent, MI	10-i-2-D	11,957	12,049	0.77%	10,626	-11.13%
Sector Subtotal	10-i-2-D	11,957	12,049	0.77%	10,626	-11.13%
Ingham, MI	10-i-2-E	4,557	4,658	2.24%	4,026	-11.64%
Eaton, MI	10-i-2-E	2,556	2,626	2.74%	2,356	-7.84%
Clinton, MI	10-i-2-E	1,486	1,544	3.94%	1,367	-7.95%
Gratiot, MI	10-i-2-E	1,125	1,256	11.63%	1,137	1.10%
Sector Subtotal	10-i-2-E	9,723	10,084	3.71%	8,886	-8.60%
Kalamazoo, MI	10-i-2-F	4,769	4,751	-0.38%	4,167	-12.63%
Calhoun, MI	10-i-2-F	4,628	4,740	2.43%	4,221	-8.78%

Note: Market totals do not exactly match following slides due to rounding by county within EHCPM.

Source: BY17 EHCPM VetPop & Enrollment

1.3.V10.MichErie#2



VISN 10: MichErie Market

Demographics ► Market Enrollee Demographics, cont.

County-Based Enrollee Projections						
County	Sector	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
Saint Joseph, MI	10-i-2-F	1,415	1,475	4.24%	1,253	-11.42%
Barry, MI	10-i-2-F	1,345	1,316	-2.15%	1,179	-12.29%
Branch, MI	10-i-2-F	1,207	1,255	4.03%	1,100	-8.83%
Sector Subtotal	10-i-2-F	13,363	13,537	1.30%	11,921	-10.79%
Jackson, MI	10-i-3-A	4,441	4,356	-1.91%	3,776	-14.98%
Hillsdale, MI	10-i-3-A	1,332	1,305	-1.99%	1,078	-19.01%
Sector Subtotal	10-i-3-A	5,773	5,661	-1.93%	4,855	-15.91%
Washtenaw, MI	10-i-3-B	5,474	5,457	-0.30%	4,672	-14.64%
Livingston, MI	10-i-3-B	3,250	3,352	3.14%	2,896	-10.88%
Lenawee, MI	10-i-3-B	2,950	3,097	4.99%	2,711	-8.09%
Sector Subtotal	10-i-3-B	11,673	11,906	1.99%	10,279	-11.94%
Lucas, OH	10-i-3-C	9,251	9,344	1.01%	8,146	-11.95%
Monroe, MI	10-i-3-C	3,697	3,886	5.13%	3,459	-6.44%
Wood, OH	10-i-3-C	2,493	2,498	0.22%	2,202	-11.68%
Ottawa, OH	10-i-3-C	1,543	1,609	4.28%	1,403	-9.07%
Fulton, OH	10-i-3-C	1,173	1,223	4.26%	1,061	-9.57%
Sector Subtotal	10-i-3-C	18,157	18,562	2.23%	16,271	-10.39%
Seneca, OH	10-i-3-E	1,879	1,808	-3.78%	1,516	-19.30%
Sandusky, OH	10-i-3-E	1,568	1,605	2.34%	1,365	-12.95%
Hancock, OH	10-i-3-E	1,569	1,549	-1.26%	1,318	-15.98%

Note: Market totals do not exactly match following slides due to rounding by county within EHCPM.

Source: BY17 EHCPM VetPop & Enrollment

1.3.V10.MichErie#3



VISN 10: MichErie Market

Demographics ► Market Enrollee Demographics, cont.

County-Based Enrollee Projections						
County	Sector	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
Sector Subtotal	10-i-3-E	5,016	4,962	-1.08%	4,199	-16.28%
Market Total	10-i	108,199	110,496	2.12%	96,299	-11.00%

Note: Market totals do not exactly match following slides due to rounding by county within EHCPM.

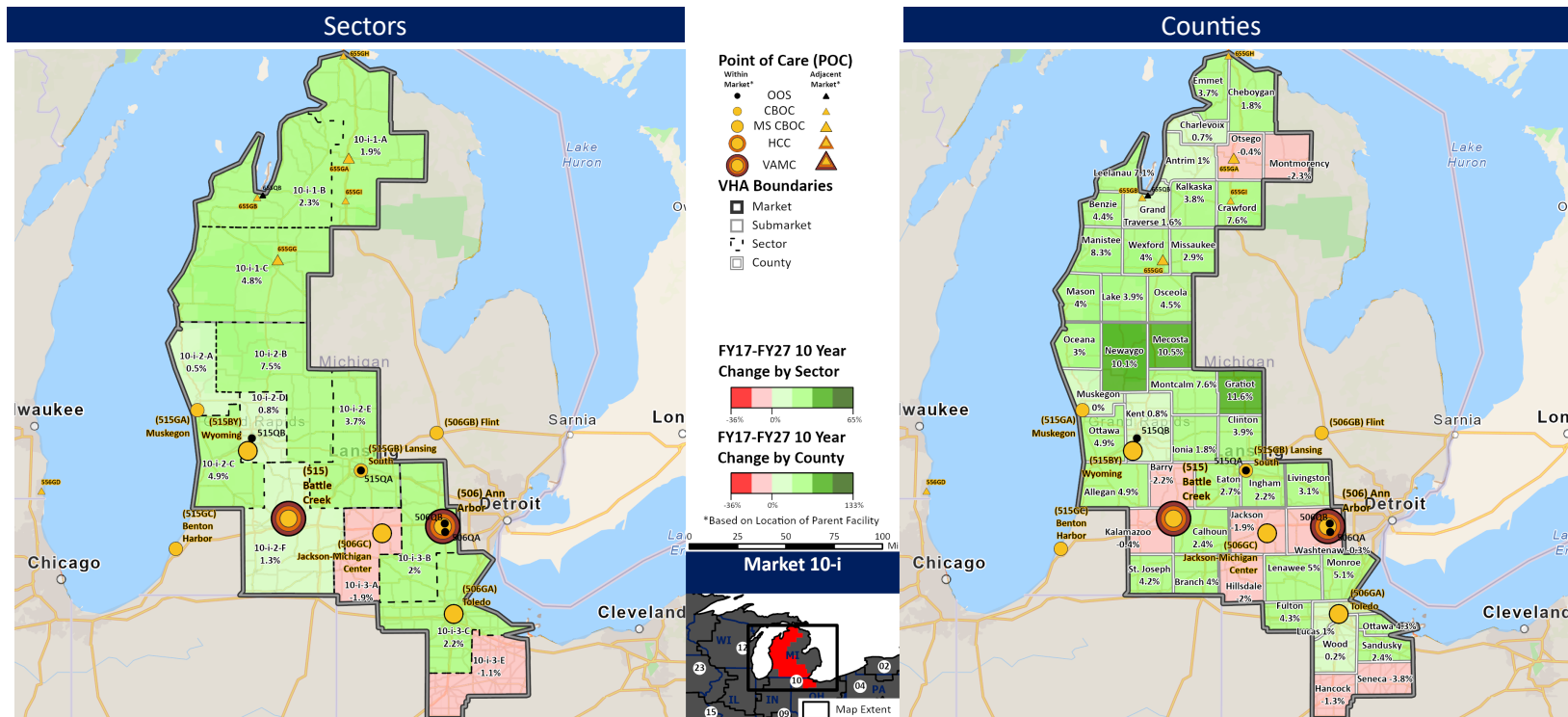
Source: BY17 EHCPM VetPop & Enrollment

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VISN 10: MichErie Market

Demographics ► Market Projected Enrollee 10-Year Change (FY17-27)



Source: BY17 EHCPM VetPop & Enrollment

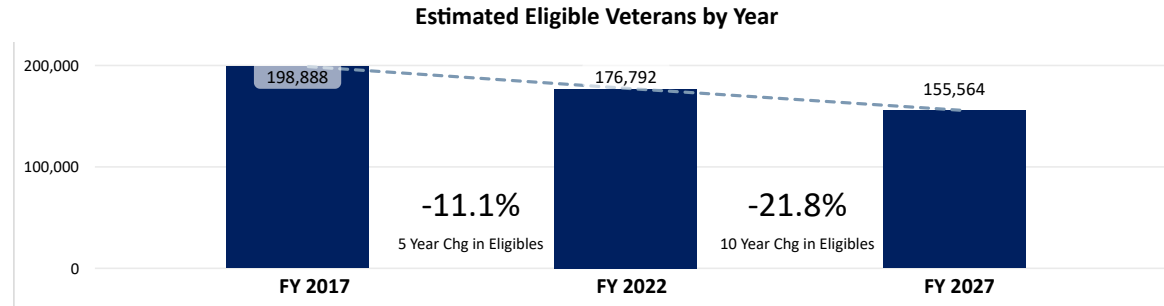
1.5.V10.MichErie



VISN 10: MichErie Market

Demographics ► Market Enrollee and Eligible Demographics

Market-Based Enrollee and Eligible Projections						
Geography	Measure	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
VISN	EOY Enrollees	668,504	662,656	-0.9%	578,845	-13.4%
Market	EOY Enrollees	108,199	110,496	2.1%	96,299	-11.0%
National	EOY Enrollees	8,753,704	8,896,391	1.6%	8,262,997	-5.6%
VISN	Eligible Veterans	1,135,601	884,968	-22.1%	680,940	-40.0%
Market	Eligible Veterans	198,888	155,564	-21.8%	118,665	-40.3%
National	Eligible Veterans	14,271,277	12,265,488	-14.1%	10,448,365	-26.8%





VISN 10: MichErie Market

Demographics ► Market Enrollee and Eligible Demographics, cont.

Sector-Based Enrollee and Eligible Projections						
Sector	Measure	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
10-i-1-A	EOY Enrollees	4,212	4,293	1.9%	3,581	-15.0%
10-i-1-B	EOY Enrollees	5,955	6,095	2.4%	5,187	-12.9%
10-i-1-C	EOY Enrollees	4,784	5,012	4.8%	4,276	-10.6%
10-i-2-A	EOY Enrollees	5,551	5,579	0.5%	4,889	-11.9%
10-i-2-B	EOY Enrollees	5,244	5,633	7.4%	5,023	-4.2%
10-i-2-C	EOY Enrollees	6,791	7,123	4.9%	6,307	-7.1%
10-i-2-D	EOY Enrollees	11,957	12,049	0.8%	10,626	-11.1%
10-i-2-E	EOY Enrollees	9,723	10,084	3.7%	8,886	-8.6%
10-i-2-F	EOY Enrollees	13,363	13,537	1.3%	11,921	-10.8%
10-i-3-A	EOY Enrollees	5,773	5,661	-1.9%	4,855	-15.9%
10-i-3-B	EOY Enrollees	11,673	11,906	2.0%	10,279	-11.9%
10-i-3-C	EOY Enrollees	18,157	18,562	2.2%	16,271	-10.4%
10-i-3-E	EOY Enrollees	5,016	4,962	-1.1%	4,199	-16.3%
10-i-1-A	EOY Eligibles	7,160	5,818	-18.8%	4,313	-39.8%
10-i-1-B	EOY Eligibles	11,124	9,089	-18.3%	6,908	-37.9%
10-i-1-C	EOY Eligibles	8,187	6,798	-17.0%	5,143	-37.2%
10-i-2-A	EOY Eligibles	10,427	8,631	-17.2%	6,680	-35.9%
10-i-2-B	EOY Eligibles	10,646	9,008	-15.4%	7,158	-32.8%
10-i-2-C	EOY Eligibles	13,579	10,668	-21.4%	8,324	-38.7%
10-i-2-D	EOY Eligibles	21,835	16,261	-25.5%	12,154	-44.3%



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Demographics ► Market Enrollee and Eligible Demographics, cont.

Sector-Based Enrollee and Eligible Projections						
Sector	Measure	FY17	FY27	10 Yr. Change	FY37	20 Yr. Change
10-i-2-E	EOY Eligibles	18,555	14,152	-23.7%	10,748	-42.1%
10-i-2-F	EOY Eligibles	23,261	18,667	-19.7%	14,523	-37.6%
10-i-3-A	EOY Eligibles	9,637	7,601	-21.1%	5,756	-40.3%
10-i-3-B	EOY Eligibles	21,551	16,240	-24.6%	12,408	-42.4%
10-i-3-C	EOY Eligibles	33,832	25,713	-24.0%	19,331	-42.9%
10-i-3-E	EOY Eligibles	9,095	6,918	-23.9%	5,220	-42.6%



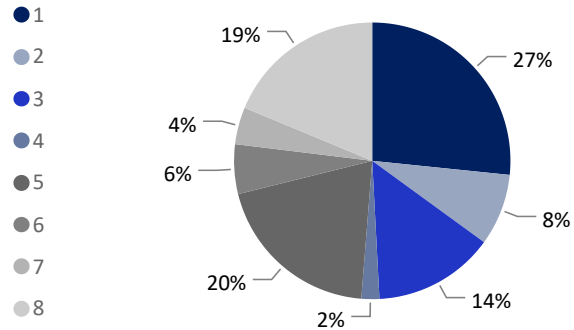
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Demographics ► Market Enrollee Priority Groups

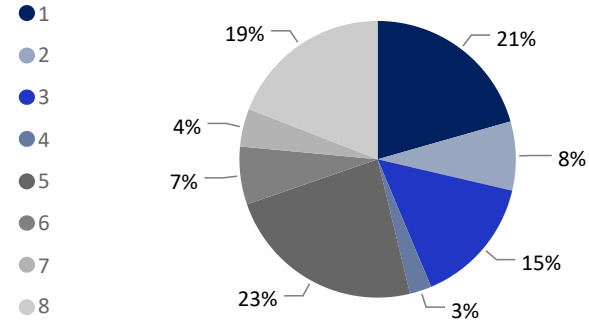
2017-2027 Market Enrollee Breakdown by Priority

Priority	Enrollees 2017	% Enrollees 2017	Enrollees 2027	% Enrollees 2027	10 Year % Change
1	24,794	22.9%	37,854	34.3%	52.7%
2	8,074	7.5%	8,507	7.7%	5.4%
3	13,265	12.3%	13,569	12.3%	2.3%
4	2,734	2.5%	2,394	2.2%	-12.4%
5	25,746	23.8%	20,133	18.2%	-21.8%
6	8,730	8.1%	6,472	5.9%	-25.9%
7	4,250	3.9%	4,676	4.2%	10.0%
8	20,606	19.0%	16,891	15.3%	-18.0%
Grand Total	108,199	100.0%	110,496	100.0%	2.1%

National



VISN 10

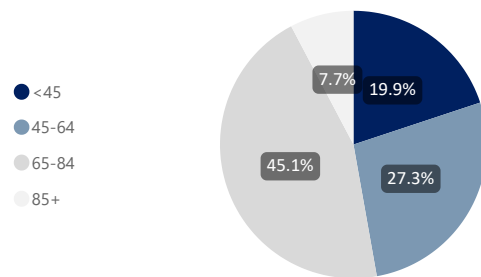




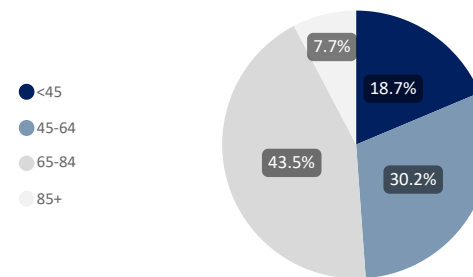
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Demographics ► Market Enrollee Population — Age and Gender

2017 MichErie Market Age Breakdown

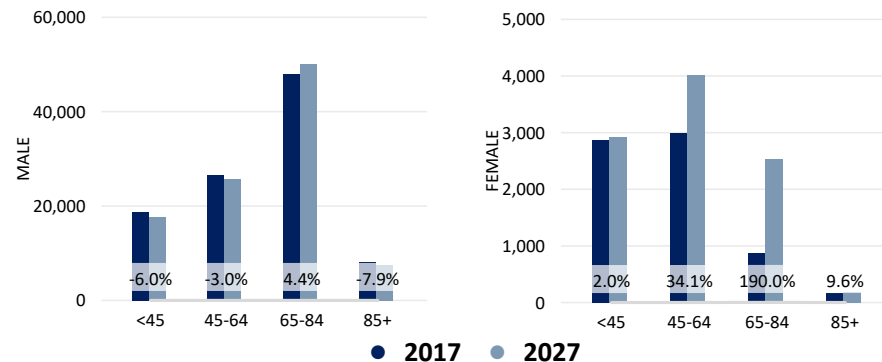


2017 VISN 10 Age Breakdown



Female Enrollee Population		
2017	2027	10 Year % Change
6,902	9,652	39.9%

Market Enrollees and Growth Rates by Age Group





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Demographics ► Market Reliance

	VA Facility Care	National VA Facility Care	VA Facility Variance from National	Community Care	National Community Care	Community Care Variance from National	Total Reliance	National Total Reliance	Total Reliance Variance from National
OP MED	23.7%	27.5%	-3.8%	4.9%	6.1%	-1.2%	28.6%	33.7%	-5.0%
PATHOLOGY	43.3%	46.3%	-2.9%	1.8%	2.6%	-0.8%	45.2%	48.9%	-3.7%
DIALYSIS	5.9%	7.4%	-1.5%	19.0%	33.4%	-14.3%	25.0%	40.8%	-15.8%
OP SURG	21.9%	23.3%	-1.4%	4.6%	5.1%	-0.5%	26.5%	28.4%	-2.0%
AUDIOLOGY	62.6%	56.7%	5.8%	2.4%	2.8%	-0.4%	65.0%	59.5%	5.5%
IP MED	11.9%	18.5%	-6.7%	6.8%	5.5%	1.3%	18.6%	24.0%	-5.4%
IP SURG	10.7%	13.6%	-2.9%	7.0%	7.8%	-0.8%	17.7%	21.4%	-3.7%
IP MH	51.7%	42.7%	9.1%	3.1%	9.5%	-6.4%	54.9%	52.2%	2.7%
OP MH	80.3%	81.1%	-0.8%	0.3%	3.0%	-2.7%	80.6%	84.2%	-3.6%
PROSTHETICS	42.6%	47.6%	-5.0%	0.0%	0.0%	0.0%	42.6%	47.6%	-5.0%
TOTAL	21.8%	25.1%	-3.4%	5.7%	6.7%	-1.0%	27.4%	31.8%	-4.4%

Projections from the VA Enrollee Health Care Projection Model (EHCPM) account for new enrollment based on demographic changes

- Projections therefore account for a different pool of enrollees in the future as the enrollment population changes
- Some Veterans who are currently ineligible and unenrolled may become enrollees in the future

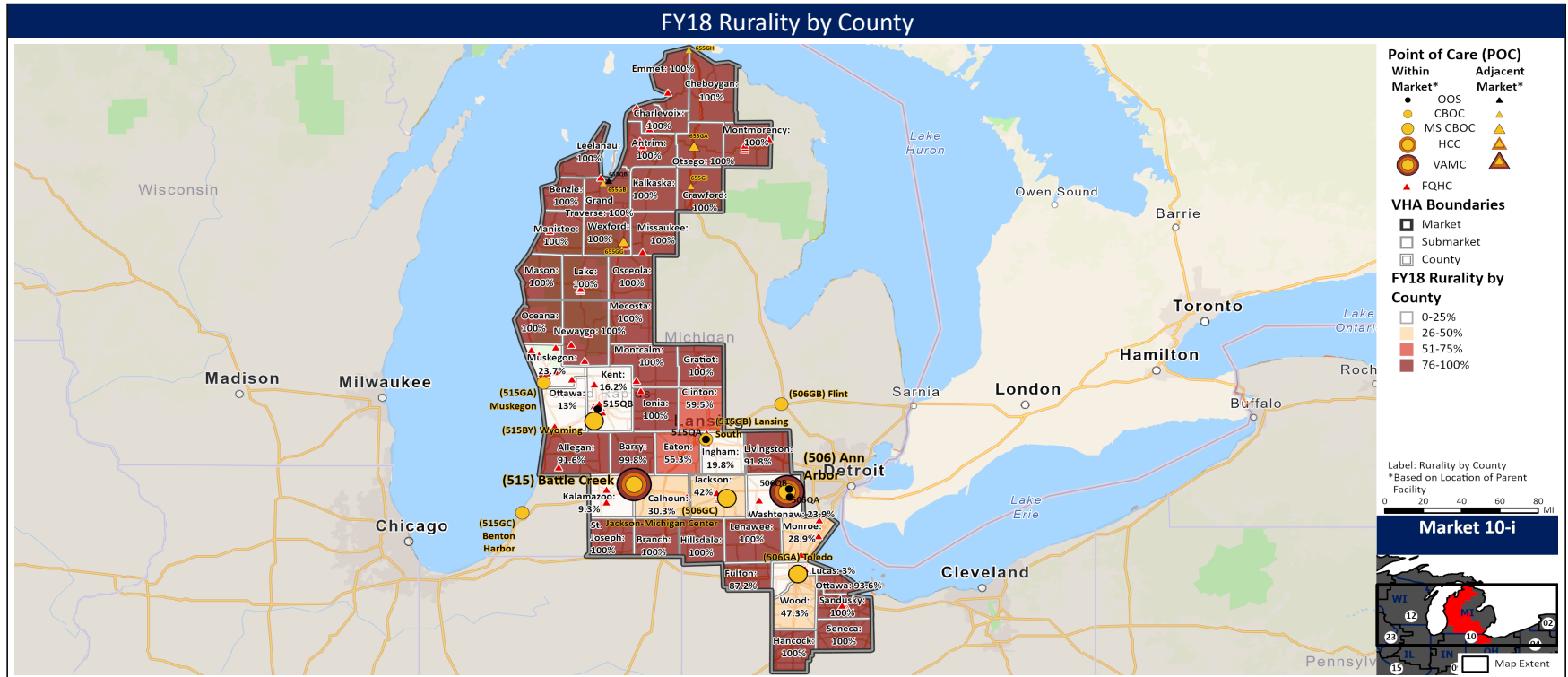
Potential use of health care in VA is projected for those Veterans who are assumed to be eligible and enrolled at a given point

- The EHCPM projects utilization of health care services rather than projecting patient/user counts
 - Some patients may use few services and some patients may use many, so projecting by utilization of health services provides a better picture of the amount of health care VA will need to provide
- Modeled projections accounts for the amount of care enrollees are expected to receive through VA rather than from their other sources of health care



VISN 10: MichErie Market

Demographics ► Market Current Enrollment Rurality – FY18



* Includes Rural and Highly Rural Locations

Source: Geocoded Enrollee File FY18Q4

1.14.V10.MichErie#IMG



VISN 10: MichErie Market

Demographics ► Market Current Enrollment Rurality — FY18, cont.

County	Urban Enrollees	Rural Enrollees*	% Rural	Total Enrollees
Allegan, MI	198	2,152	91.6%	2,350
Antrim, MI	0	755	100.0%	755
Barry, MI	4	1,645	99.8%	1,649
Benzie, MI	0	686	100.0%	686
Branch, MI	0	1,182	100.0%	1,182
Calhoun, MI	3,073	1,339	30.3%	4,412
Charlevoix, MI	0	831	100.0%	831
Cheboygan, MI	0	1,206	100.0%	1,206
Clinton, MI	529	776	59.5%	1,305
Crawford, MI	0	710	100.0%	710
Eaton, MI	1,011	1,302	56.3%	2,313
Emmet, MI	0	917	100.0%	917
Fulton, OH	136	928	87.2%	1,064
Grand Traverse, MI	0	2,392	100.0%	2,392
Gratiot, MI	0	1,035	100.0%	1,035
Hancock, OH	0	1,817	100.0%	1,817
Hillsdale, MI	0	1,384	100.0%	1,384
Ingham, MI	3,773	930	19.8%	4,703
Ionia, MI	0	1,247	100.0%	1,247
Jackson, MI	2,564	1,855	42.0%	4,419

* Includes Rural and Highly Rural Locations.

Source: Geocoded Enrollee File FY18Q4

1.13.V10.MichErie



VISN 10: MichErie Market

Demographics ► Market Current Enrollment Rurality — FY18, cont.

County	Urban Enrollees	Rural Enrollees*	% Rural	Total Enrollees
Kalamazoo, MI	4,518	465	9.3%	4,983
Kalkaska, MI	0	661	100.0%	661
Kent, MI	9,614	1,855	16.2%	11,469
Lake, MI	0	508	100.0%	508
Leelanau, MI	0	623	100.0%	623
Lenawee, MI	0	2,840	100.0%	2,840
Livingston, MI	319	3,583	91.8%	3,902
Lucas, OH	9,074	280	3.0%	9,354
Manistee, MI	0	863	100.0%	863
Mason, MI	0	892	100.0%	892
Mecosta, MI	0	1,069	100.0%	1,069
Missaukee, MI	0	515	100.0%	515
Monroe, MI	2,572	1,046	28.9%	3,618
Montcalm, MI	0	1,614	100.0%	1,614
Montmorency, MI	0	478	100.0%	478
Muskegon, MI	3,528	1,096	23.7%	4,624
Newaygo, MI	0	1,613	100.0%	1,613
Oceana, MI	0	797	100.0%	797
Osceola, MI	0	724	100.0%	724
Otsego, MI	0	948	100.0%	948

* Includes Rural and Highly Rural Locations.

Source: Geocoded Enrollee File FY18Q4

1.13.V10.MichErie#2



VISN 10: MichErie Market

Demographics ► Market Current Enrollment Rurality — FY18, cont.

County	Urban Enrollees	Rural Enrollees*	% Rural	Total Enrollees
Ottawa, MI	3,966	595	13.0%	4,561
Ottawa, OH	96	1,394	93.6%	1,490
Saint Joseph, MI	0	1,322	100.0%	1,322
Sandusky, OH	0	1,791	100.0%	1,791
Seneca, OH	0	1,628	100.0%	1,628
Washtenaw, MI	4,321	1,355	23.9%	5,676
Wexford, MI	0	1,193	100.0%	1,193
Wood, OH	1,350	1,210	47.3%	2,560
Total	50,646	58,047	53.4%	108,693

* Includes Rural and Highly Rural Locations.

Source: Geocoded Enrollee File FY18Q4

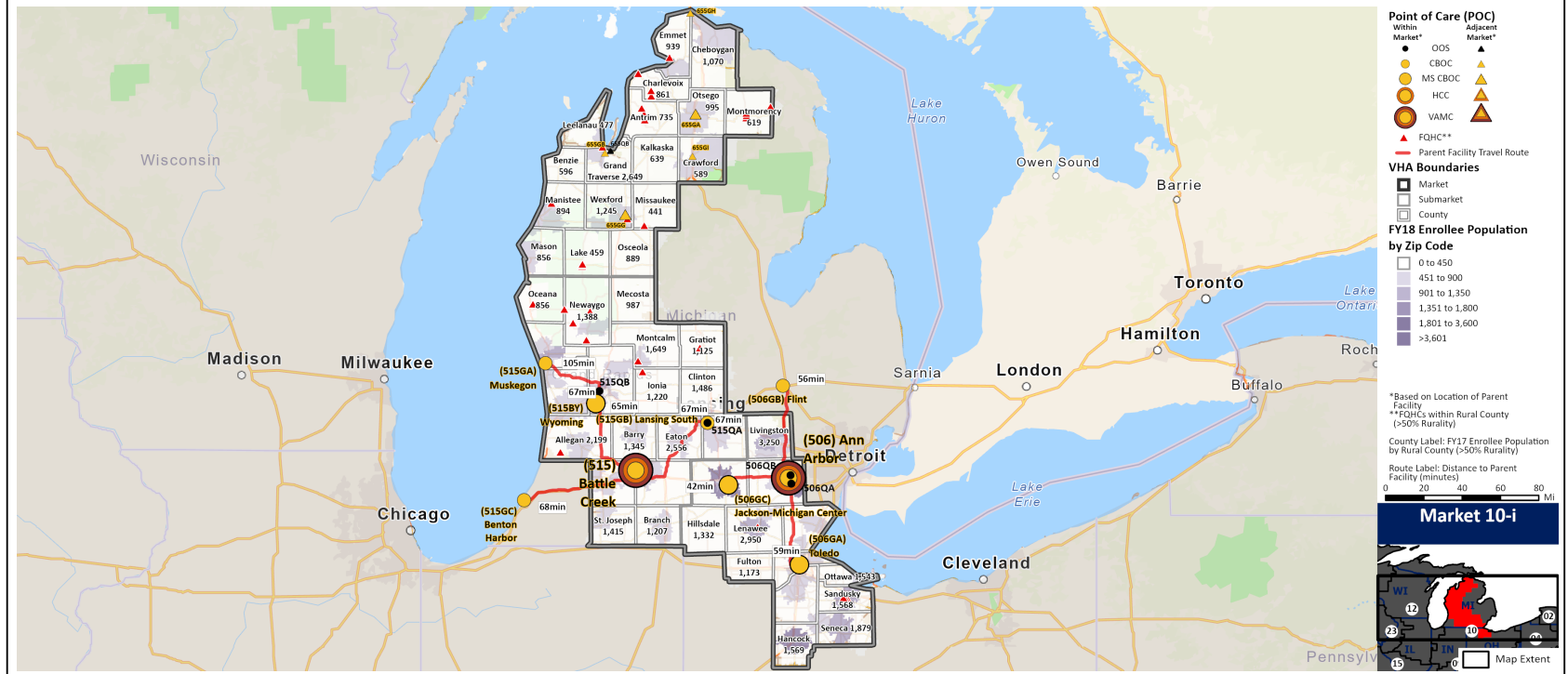
1.13.V10.MichErie#3



VISN 10: MichErie Market

Demographics ► Market Rurality

FQHCs Within Rural Counties (>50% Demographics)



Source: 1. Geocoded Enrollee File FY18Q4 2. HRSA Data Warehouse

1.15.V10.MichErie



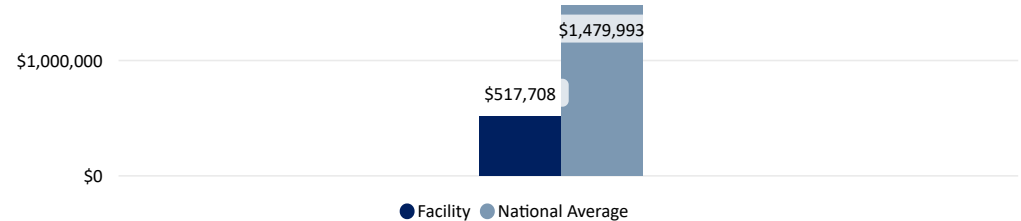
VISN 10: MichErie Market — Ann Arbor-Michigan

Demographics ► Office of Rural Health FY19 Funded Project List

Parent Facility	Treating Facility Number	Treating Facility Name	Initiative Title	Approved Funding
(V10) (506) Ann Arbor-Michigan	506	(V10) (506) Ann Arbor-Michigan	Home Based Primary Care (HBPC)	\$166,160
(V10) (506) Ann Arbor-Michigan	506	(V10) (506) Ann Arbor-Michigan	Gerofit	\$149,948
(V10) (506) Ann Arbor-Michigan	506	(V10) (506) Ann Arbor-Michigan	Medical Foster Home	\$121,200
(V10) (506) Ann Arbor-Michigan	506	(V10) (506) Ann Arbor-Michigan	Teledermatology Hub	\$80,400

Office of Rural Health Project Funding Allocation		
Medical Center	% National 2019	Total Funding
Ann Arbor-Michigan	0.30%	\$517,708
National	100.00%	\$173,159,235

FY19 Office of Rural Health Funded Project Allocation vs. Average National Allocation*



Rank: 79 out of 117 Parent Facilities (ranked by total \$ funding)

*111 Parent Facilities received ORH Funding Allocation for FY19

Note: The FY19 Funded Project List includes the top ten projects by approved funding.

Source: VHA Office of Rural Health

1.16.V10.MichErie.506



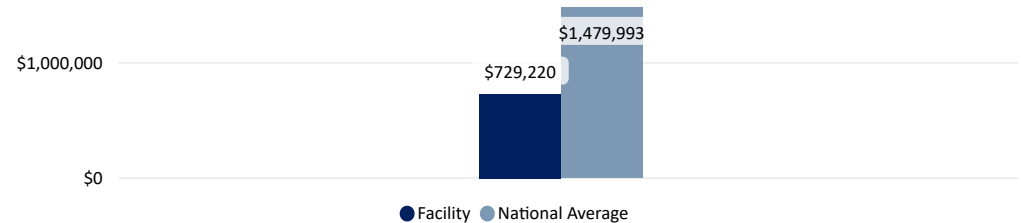
VISN 10: MichErie Market — Battle Creek

Demographics ► Office of Rural Health FY19 Funded Project List

Parent Facility	Treating Facility Number	Treating Facility Name	Initiative Title	Approved Funding
(V10) (515) Battle Creek	515GC	(V10) (515GC) Benton Harbor - (V10) Indiana	Telemental Health Hub	\$326,067
(V10) (515) Battle Creek	515GC	(V10) (515GC) Benton Harbor - (V10) Indiana	Medical Foster Home	\$303,001
(V10) (515) Battle Creek	515GC	(V10) (515GC) Benton Harbor - (V10) Indiana	Social Work in Patient Aligned Care Teams (PACT)	\$100,152

Office of Rural Health Project Funding Allocation		
Medical Center	% National 2019	Total Funding
Battle Creek	0.42%	\$729,220
National	100.00%	\$173,159,235

FY19 Office of Rural Health Funded Project Allocation vs. Average National Allocation*

Rank: **66** out of 117 Parent Facilities (ranked by total \$ funding)

*111 Parent Facilities received ORH Funding Allocation for FY19

Note: The FY19 Funded Project List includes the top ten projects by approved funding.

Source: VHA Office of Rural Health

1.16.V10.MichErie.515



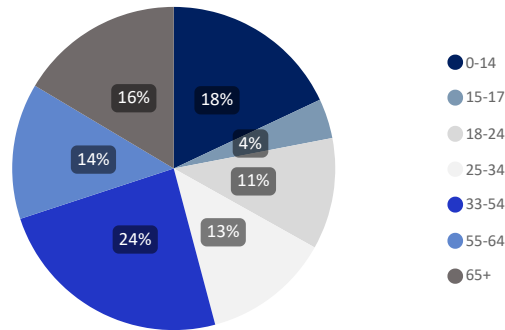
VISN 10: MichErie Market

Demographics ► Overall Market Population (Veterans and Non-Veterans) — MichErie Market

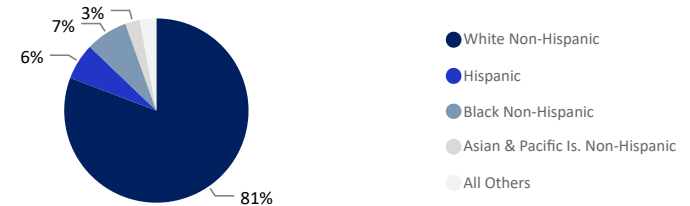
Demographic Summary – MichErie			
	2018	2028*	% Change
Population	4,801,758	4,941,888	2.9%
Male	2,378,931	2,448,563	2.9%
Female	2,422,827	2,493,320	2.9%

* Population projections available through 2023; straight line growth rates applied through 2028.

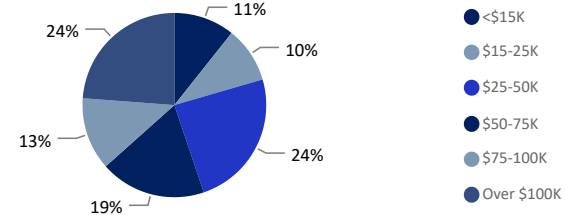
Population Distribution by Age Group



Population Distribution by Race/Ethnicity



Households by Income Group





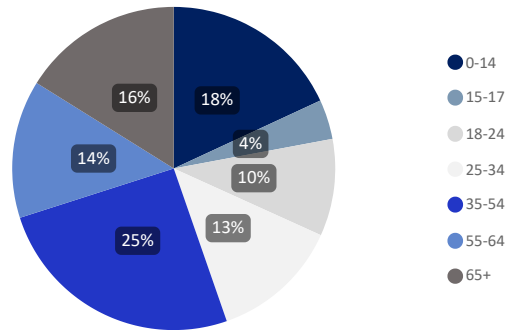
VISN 10: MichErie Market — Ann Arbor-Michigan

Demographics ► Overall Parent Facility Area Population (Veterans and Non-Veterans) — Ann Arbor-Michigan Area

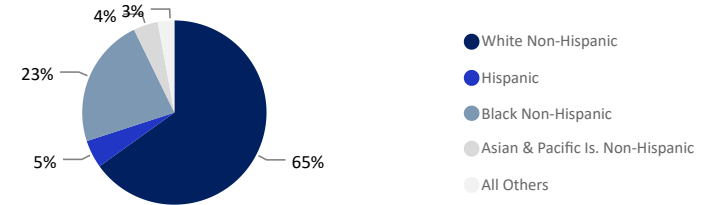
Demographic Summary – Ann Arbor-Michigan Area			
	2018	2028*	% Change
Population	4,851,190	4,840,118	-0.2%
Female	2,490,142	2,478,239	-0.5%
Male	2,361,048	2,361,879	0.0%

* Population projections available through 2023; straight line growth rates applied through 2028. Population based on area within 60 minute drive from applicable VAMC/HCC.

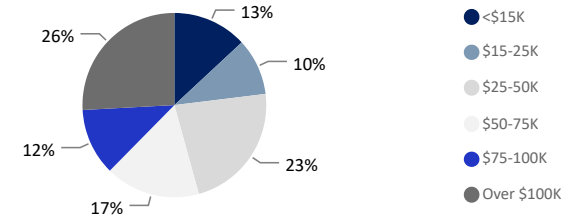
Population Distribution by Age Group



Population Distribution by Race/Ethnicity



Households by Income Group





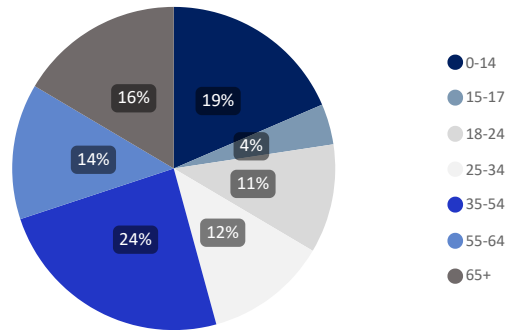
VISN 10: MichErie Market — Battle Creek

Demographics ► Overall Parent Facility Area Population (Veterans and Non-Veterans) — Battle Creek Area

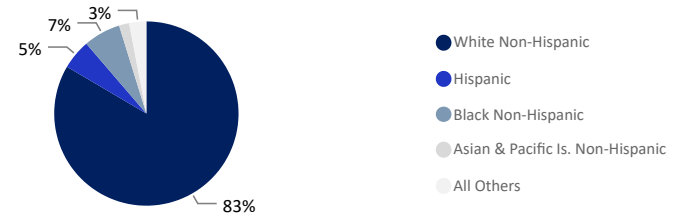
Demographic Summary – Battle Creek Area			
	2018	2028*	% Change
Population	901,439	924,699	2.6%
Female	452,731	464,754	2.7%
Male	448,708	459,940	2.5%

* Population projections available through 2023; straight line growth rates applied through 2028. Population based on area within 60 minute drive from applicable VAMC/HCC.

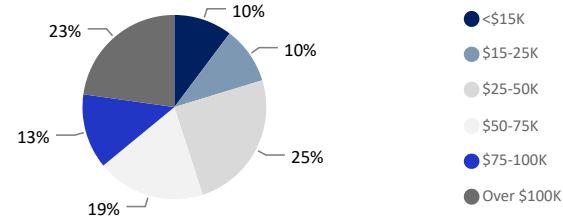
Population Distribution by Age Group



Population Distribution by Race/Ethnicity



Households by Income Group





Demand ► **Estimated Current and Historic Market Demand — Outpatient**



VISN 10: MichErie Market

Demand ► Core Uniques Trends by Facility

Core Uniques*							
Facility	FY13	FY14	FY15	FY16	FY17	FY18	6 Year Change
(V10) (506) Ann Arbor-Michigan	49,435	53,575	53,152	55,363	55,873	52,517	6.2%
(V10) (506GA) Toledo	14,303	14,526	15,407	15,622	16,099	16,134	12.8%
(V10) (506GB) Flint - (V10) Eastern Michig...	2,665	2,930	3,238	3,493	3,785	3,852	44.5%
(V10) (506GC) Jackson-Michigan Center	3,083	3,385	3,488	3,757	3,846	4,145	34.4%
(V10) (506QA) Ann Arbor-Packard Road	N/A	N/A	N/A	N/A	1,523	7,590	N/A
(V10) (506QB) Green Road	N/A	N/A	N/A	N/A	N/A	7,669	N/A
(V10) (515) Battle Creek	27,842	30,227	31,437	31,970	31,862	30,169	8.4%
(V10) (515BU) Battle Creek Domiciliary	624	624	628	942	971	792	26.9%
(V10) (515BY) Wyoming	17,808	18,086	18,237	20,120	21,154	21,241	19.3%
(V10) (515GA) Muskegon	4,002	4,565	4,402	4,648	4,940	5,129	28.2%
(V10) (515GB) Lansing South	3,872	4,090	4,246	4,405	4,429	4,575	18.2%
(V10) (515GC) Benton Harbor - (V10) Indi...	2,861	2,826	2,801	2,877	2,911	2,956	3.3%
(V10) (515PA) Battle Creek PR RTP	27	58	23	81	71	78	188.9%
(V10) (515QA) Lansing North	N/A	N/A	N/A	N/A	496	582	N/A
(V10) (515QB) Century Avenue	N/A	N/A	N/A	N/A	771	879	N/A

*Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.



VISN 10: MichErie Market

Demand ► Core Uniques Trends by Facility

Core Uniques*							
Facility	FY13	FY14	FY15	FY16	FY17	FY18	6 Year Change
(V10) (655GA) Gaylord	3,596	3,616	3,433	3,638	3,630	3,712	3.2%
(V10) (655GB) Traverse City	5,065	4,857	5,470	5,221	4,037	4,099	-19.1%
(V10) (655GG) Cadillac	2,394	2,595	2,854	3,143	3,441	3,657	52.8%
(V10) (655GH) Cheboygan County	1,529	1,285	1,376	1,603	1,683	1,833	19.9%
(V10) (655GI) Grayling	692	1,060	1,249	1,520	1,546	1,568	126.6%
(V10) (655QB) Grand Traverse	N/A	N/A	N/A	1,827	2,787	3,071	N/A

*Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.



VISN 10: MichErie Market

Demand ► Outpatient Encounters FY15-18

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506) Ann Arbor-Michigan	47,116	46,904	43,320	47,082	53,210	55,848	56,726	55,251	164,666	166,014	166,744	147,603
(V10) (506GA) Toledo	19,274	18,432	17,800	16,282	37,786	35,178	35,119	32,983	36,526	37,959	36,696	35,287
(V10) (506GB) Flint - (V10) Eastern Michigan	5,609	5,644	5,815	4,971	6,603	6,999	7,510	8,909	1,138	1,139	1,355	1,284
(V10) (506GC) Jackson-Michigan Center	3,937	3,629	3,776	3,589	8,505	9,026	9,826	9,784	903	1,730	1,717	3,646
(V10) (506QA) Ann Arbor-Packard Road	N/A	N/A	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	402	11,783
(V10) (506QB) Green Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5,552
(V10) (506) Ann Arbor-Michigan Total	75,936	74,609	70,712	71,924	106,104	107,051	109,181	106,927	203,233	206,842	206,914	205,155
(V10) (515) Battle Creek	47,005	30,649	24,589	25,790	28,106	27,103	28,704	26,515	55,546	57,537	59,645	55,059
(V10) (515BU) Battle Creek Domiciliary	N/A	12,332	14,704	13,185	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (515BY) Wyoming	14,259	17,757	18,309	18,743	26,384	28,941	32,128	31,739	41,249	45,783	53,054	52,606
(V10) (515GA) Muskegon	3,427	2,953	4,141	4,866	9,851	10,311	11,124	12,382	1,615	1,718	1,992	1,443
(V10) (515GB) Lansing South	3,104	4,106	4,188	5,207	9,475	10,005	10,390	11,040	1,380	1,282	1,217	1,149
(V10) (515GC) Benton Harbor - (V10) Indiana	2,783	2,963	3,913	4,190	5,541	5,552	5,494	5,119	1,041	971	981	818
(V10) (515PA) Battle Creek PR RTP	N/A	122	136	194	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (515QA) Lansing North	N/A	N/A	N/A	N/A	N/A	N/A	421	439	N/A	N/A	N/A	N/A
(V10) (515QB) Century Avenue	N/A	N/A	N/A	N/A	N/A	N/A	275	399	N/A	N/A	N/A	N/A
(V10) (515) Battle Creek Total	70,578	70,882	69,980	72,175	79,357	81,912	88,536	87,633	100,831	107,291	116,889	111,075
(V10) (655GA) Gaylord	2,987	3,243	2,908	2,948	5,514	5,547	5,764	5,698	1,427	1,699	1,633	1,558
(V10) (655GB) Traverse City	8,147	5,317	886	620	7,272	7,167	6,726	6,609	2,632	1,793	670	840
(V10) (655GG) Cadillac	3,223	3,314	3,305	3,231	3,914	3,841	3,968	4,086	3,229	3,938	5,149	5,251

Source: VSSC Outpatient Encounters Cube

2.20.V10.MichErie



VISN 10: MichErie Market

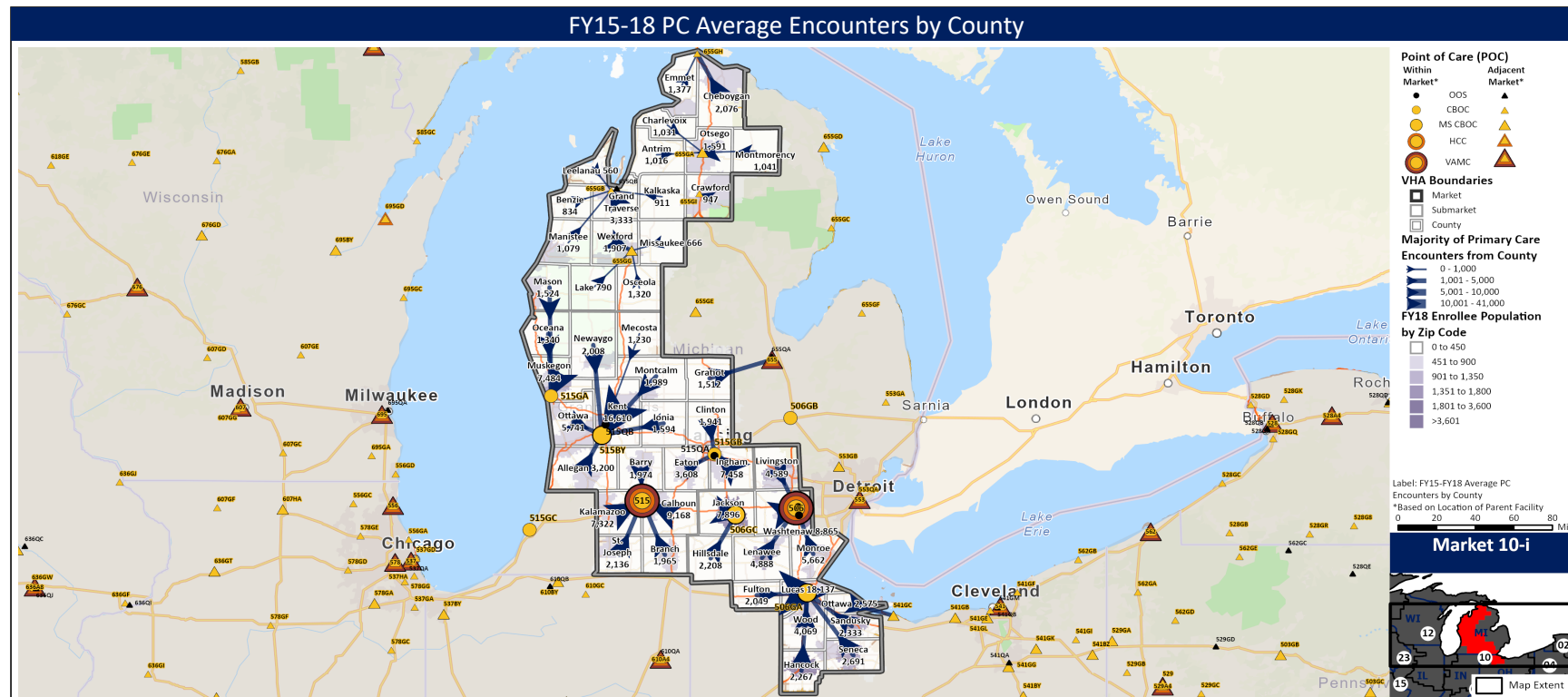
Demand ► Outpatient Encounters FY15-18, cont.

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655GH) Cheboygan County	2,899	3,559	3,564	3,458	2,565	2,582	2,601	3,116	349	368	489	573
(V10) (655GI) Grayling	1,632	1,804	2,257	2,103	2,449	2,714	2,436	2,658	971	1,035	946	869
(V10) (655QB) Grand Traverse	N/A	3,071	7,858	7,921	N/A	N/A	N/A	N/A	N/A	882	1,578	2,422
(V10) (655) Saginaw-Michigan Total	18,888	20,308	20,778	20,281	21,714	21,851	21,495	22,167	8,608	9,715	10,465	11,513
(V10) MichErie Total	165,402	165,799	161,470	164,380	207,175	210,814	219,212	216,727	312,672	323,848	334,268	327,743



VISN 10: MichErie Market

Demand ► Primary Care Encounters – FY15-18



Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.1.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Primary Care Encounters – FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Allegan,MI	3,200	3,317	(515BY) Wyoming	58.7%
Antrim,MI	1,015	951	(655GA) Gaylord	52.4%
Barry,MI	1,974	2,135	(515) Battle Creek	65.8%
Benzie,MI	833	790	(655GB) Traverse City	89.4%
Branch,MI	1,965	1,968	(515) Battle Creek	82.5%
Calhoun,MI	9,168	8,894	(515) Battle Creek	91.9%
Charlevoix,MI	1,030	1,126	(655GA) Gaylord	83.5%
Cheboygan,MI	2,076	2,228	(655GH) Cheboygan County	71.8%
Clinton,MI	1,941	2,154	(515GB) Lansing South	78.1%
Crawford,MI	947	946	(655GI) Grayling - (V10) MichErie	71.6%
Eaton,MI	3,607	3,869	(515GB) Lansing South	62.2%
Emmet,MI	1,377	1,503	(655GH) Cheboygan County	61.0%
Fulton,OH	2,049	1,968	(506GA) Toledo	92.4%
Grand Traverse,MI	3,333	3,174	(655GB) Traverse City - (V10) MichErie	94.8%
Gratiot,MI	1,511	1,573	(655) Saginaw-Michigan	70.2%
Hancock,OH	2,266	2,241	(506GA) Toledo	78.3%
Hillsdale,MI	2,207	2,294	(506GC) Jackson-Michigan Center	63.1%
Ingham,MI	7,458	7,843	(515GB) Lansing South	72.8%
Ionia,MI	1,593	1,618	(515BY) Wyoming	70.6%
Jackson,MI	7,895	8,002	(506GC) Jackson-Michigan Center	80.1%

Note: Yellow cells indicate counties going out of Market/VISN for the majority of encounters.

Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.1.V10.MichErie



VISN 10: MichErie Market

Demand ► Primary Care Encounters – FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Kalamazoo,MI	7,322	7,377	(515) Battle Creek	94.9%
Kalkaska,MI	911	914	(655GB) Traverse City	65.6%
Kent,MI	16,609	17,517	(515BY) Wyoming	94.3%
Lake,MI	790	795	(655GG) Cadillac - (V10) MichErie	43.5%
Leelanau,MI	560	581	(655GB) Traverse City - (V10) MichErie	93.6%
Lenawee,MI	4,888	4,951	(506) Ann Arbor-Michigan	73.1%
Livingston,MI	4,589	4,751	(506) Ann Arbor-Michigan	95.3%
Lucas,OH	18,137	16,905	(506GA) Toledo	95.5%
Manistee,MI	1,078	1,106	(655GB) Traverse City	50.4%
Mason,MI	1,524	1,577	(515GA) Muskegon	75.8%
Mecosta,MI	1,229	1,320	(515BY) Wyoming	51.6%
Missaukee,MI	666	688	(655GG) Cadillac	80.1%
Monroe,MI	5,662	5,687	(506) Ann Arbor-Michigan	62.5%
Montcalm,MI	1,989	2,088	(515BY) Wyoming	71.1%
Montmorency,MI	1,041	1,124	(655GA) Gaylord - (V10) MichErie	53.8%
Muskegon,MI	7,484	8,393	(515GA) Muskegon	88.3%
Newaygo,MI	2,008	2,181	(515BY) Wyoming	62.7%
Oceana,MI	1,340	1,439	(515GA) Muskegon	76.0%
Osceola,MI	1,320	1,278	(655GG) Cadillac	59.5%
Otsego,MI	1,591	1,625	(655GA) Gaylord	91.4%

Note: Yellow cells indicate counties going out of Market/VISN for the majority of encounters.

Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.1.V10.MichErie#2



VISN 10: MichErie Market

Demand ► Primary Care Encounters – FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Ottawa,MI	5,741	6,283	(515BY) Wyoming	76.5%
Ottawa,OH	2,574	2,432	(541GC) Sandusky	63.3%
Saint Joseph,MI	2,135	2,027	(515) Battle Creek	82.0%
Sandusky,OH	2,333	2,228	(506GA) Toledo	56.2%
Seneca,OH	2,691	2,547	(506GA) Toledo	78.8%
Washtenaw,MI	8,864	8,853	(506) Ann Arbor-Michigan	95.1%
Wexford,MI	1,906	1,855	(655GG) Cadillac - (V10) MichErie	77.4%
Wood,OH	4,069	3,952	(506GA) Toledo	94.5%
Total	168,496	171,068		

Note: Yellow cells indicate counties going out of Market/VISN for the majority of encounters.

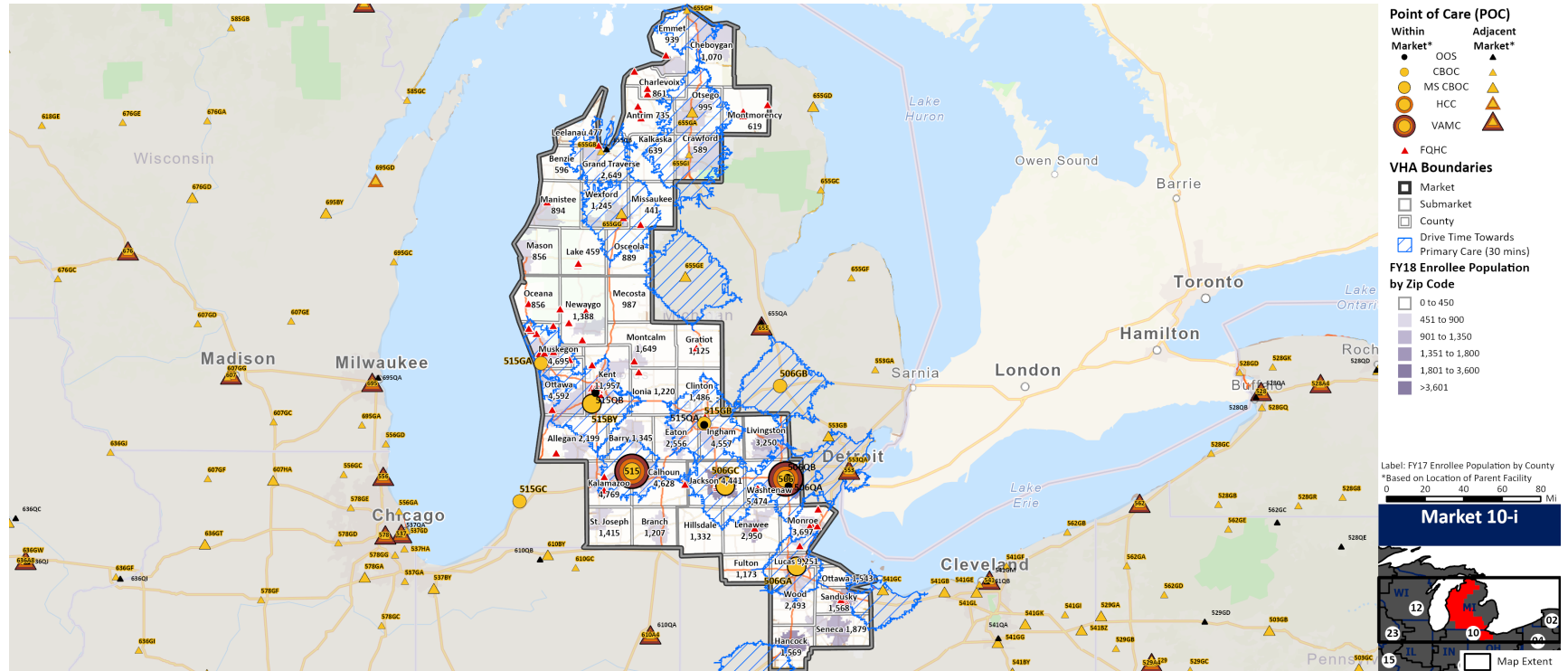
Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.1.V10.MichErie#3



VISN 10: MichErie Market

Demand ► Primary Care Drive Times for FY18 Enrollees



Source: Geocoded Enrollee File FY18Q4

2.3.V10.MichErie



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Top Primary Care Stop Code* Trends FY15-FY18 — Ann Arbor-Michigan

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch
(V10) (506) Ann Arbor-Michigan	(323) PRIMARY CARE/MEDICINE	51,992	54,692	55,659	54,392	4.6%	20,571	20,915	21,181	21,213	3.1%	57,648	59,882	63,489	65,196	13.1%
(V10) (506) Ann Arbor-Michigan	(350) GeriPACT	1,218	1,156	1,067	859	-29.5%	280	282	257	255	-8.9%	2,595	1,190	1,340	810	-68.8%
(V10) (506GA) Toledo	(323) PRIMARY CARE/MEDICINE	37,658	35,030	34,979	32,846	-12.8%	12,992	13,094	13,311	13,238	1.9%	38,008	36,788	38,217	38,815	2.1%
(V10) (506GA) Toledo	(322) Comprehensive Women's Primary Care Clinic	128	146	140	137	7.0%	119	138	131	134	12.6%	219	258	243	239	9.4%
(V10) (506GA) Toledo	(350) GeriPACT	N/A	2	N/A	N/A		N/A	1	N/A	N/A		N/A	0	N/A	N/A	
(V10) (506GB) Flint - (V10) Eastern Michigan	(323) PRIMARY CARE/MEDICINE	6,598	6,991	7,509	8,909	35.0%	2,878	3,080	3,308	3,420	18.8%	7,424	7,783	8,456	8,903	19.9%
(V10) (506GB) Flint - (V10) Eastern Michigan	(350) GeriPACT	5	8	1	N/A	-100.0%	3	3	1	N/A	-100.0%	1	0	0	N/A	-99.2%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments. * Includes top 3 stop codes, where applicable (some sites reported less than 3).



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Top Primary Care Stop Code* Trends FY15-FY18 — Ann Arbor-Michigan, cont.

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch
(V10) (506GC) Jackson-Michigan Center	(323) PRIMARY CARE/MEDICINE	8,501	9,024	9,826	9,784	15.1%	3,221	3,449	3,563	3,669	13.9%	8,285	8,629	9,200	9,431	13.8%
(V10) (506GC) Jackson-Michigan Center	(350) GeriPACT	4	2	N/A	N/A	-100.0%	2	1	N/A	N/A	-100.0%	3	0	N/A	N/A	-100.6%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments. * Includes top 3 stop codes, where applicable (some sites reported less than 3).

Source: VSSC Encounters Cube – Public Grouping (Primary Care)

2.4.V10.MichErie.506#2



VISN 10: MichErie Market — Battle Creek

Demand ► Top Primary Care Stop Code* Trends FY15-FY18 — Battle Creek

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch
(V10) (515) Battle Creek	(323) PRIMARY CARE/MEDICINE	27,890	26,924	28,472	26,292	-5.7%	10,752	10,655	10,859	10,354	-3.7%	28,230	26,680	26,576	26,232	-7.1%
(V10) (515) Battle Creek	(350) GeriPACT	216	179	232	223	3.2%	117	75	95	97	-17.1%	35	19	196	160	350.8%
(V10) (515BY) Wyoming	(323) PRIMARY CARE/MEDICINE	26,384	28,941	32,128	31,739	20.3%	13,735	14,341	14,406	14,398	4.8%	28,579	30,478	33,541	35,569	24.5%
(V10) (515GA) Muskegon	(323) PRIMARY CARE/MEDICINE	9,851	10,311	11,124	12,382	25.7%	3,931	4,241	4,402	4,531	15.3%	9,422	10,342	12,254	13,278	40.9%
(V10) (515GB) Lansing South	(323) PRIMARY CARE/MEDICINE	9,475	10,005	10,390	11,040	16.5%	3,745	3,873	3,984	3,999	6.8%	8,828	9,439	10,059	11,776	33.4%
(V10) (515GC) Benton Harbor - (V10) Indiana	(323) PRIMARY CARE/MEDICINE	5,541	5,552	5,494	5,119	-7.6%	2,562	2,553	2,548	2,408	-6.0%	4,236	4,423	4,626	5,752	35.8%
(V10) (515QA) Lansing North	(323) PRIMARY CARE/MEDICINE	N/A	N/A	421	439		N/A	N/A	132	126		N/A	N/A	253	299	

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments. * Includes top 3 stop codes, where applicable (some sites reported less than 3).

Source: VSSC Encounters Cube – Public Grouping (Primary Care)

2.4.V10.MichErie.515



VISN 10: MichErie Market — Battle Creek

Demand ► Top Primary Care Stop Code* Trends FY15-FY18 — Battle Creek, cont.

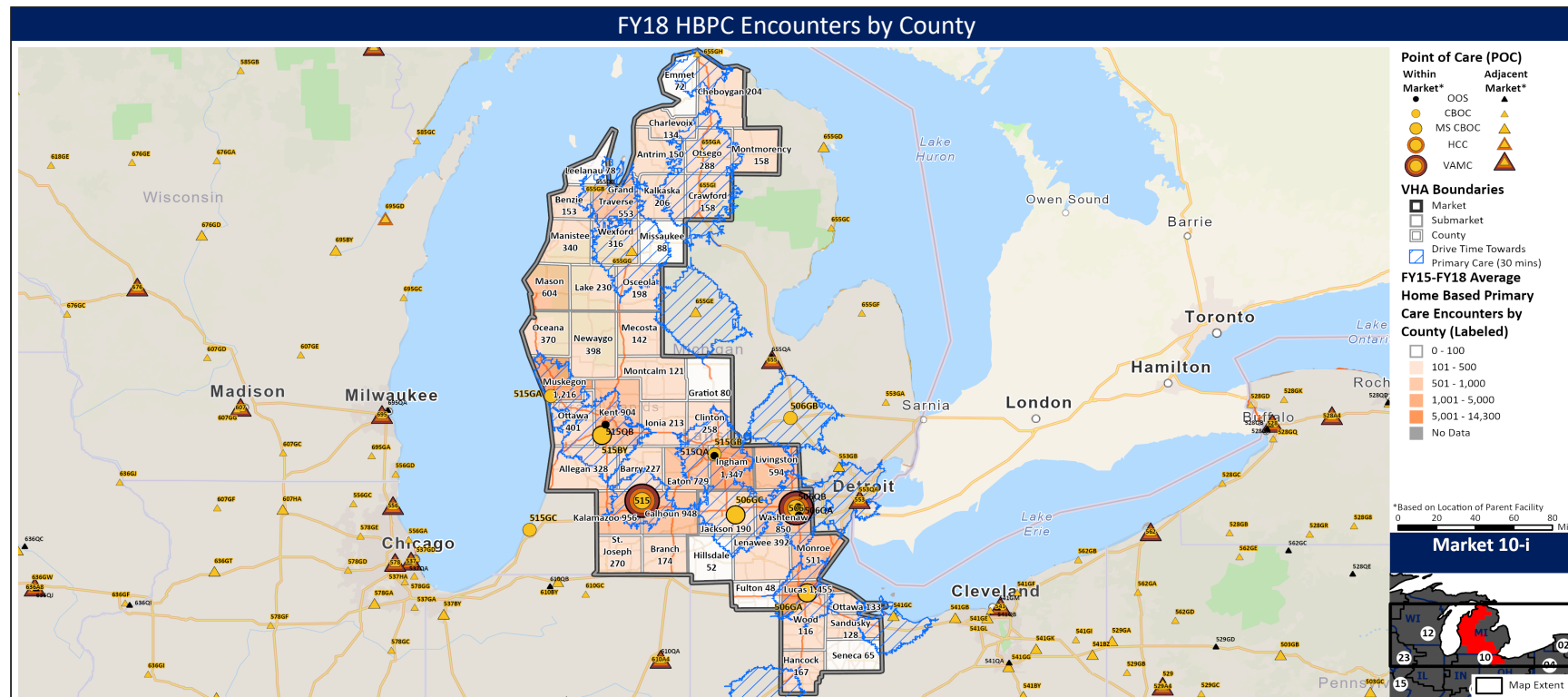
Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch	FY15	FY16	FY17	FY18	4 Yr. Ch
(V10) (515QB) Century Avenue	(323) PRIMARY CARE/MEDICINE	N/A	N/A	275	399		N/A	N/A	99	127		N/A	N/A	176	268	

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments. * Includes top 3 stop codes, where applicable (some sites reported less than 3).



VISN 10: MichErie Market

Demand ► Home-Based Primary Care



Source: VSSC Encounters Cube

2.14.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Home-Based Primary Care, cont.

FY15-18 HBPC Uniques & Encounter Distribution

Facility	Uniques					Encounters				
	FY15	FY16	FY17	FY18	AVG	FY15	FY16	FY17	FY18	AVG
(506) Ann Arbor-Michigan	270	234	251	279	258	4,481	3,514	2,984	3,787	3,691
(506GA) Toledo	154	158	141	173	156	2,412	2,498	3,271	3,950	3,032
(515) Battle Creek	193	205	250	267	228	3,196	3,020	3,141	3,133	3,122
(515BY) Wyoming	129	99	86	77	97	2,087	1,506	1,174	822	1,397
(515GA) Muskegon	274	186	186	179	206	3,001	3,249	3,227	2,866	3,085
(515GB) Lansing South	134	141	144	185	151	2,686	2,865	2,702	2,136	2,597
(515GC) Benton Harbor - (V10) Indiana	123	122	121	125	122	1,838	1,499	1,172	1,066	1,393
(655GA) Gaylord	85	91	122	108	101	1,250	1,340	1,442	1,592	1,406
(655GB) Traverse City	96	82	N/A	N/A	89	1,293	922	N/A	N/A	1,107
(655GG) Cadillac	4	4	6	8	5	4	5	13	12	8
(655GI) Grayling	2	N/A	1	2	1	2	N/A	1	2	1
(655QB) Grand Traverse	N/A	78	98	87	87	N/A	662	1,524	1,540	1,242



VISN 10: MichErie Market

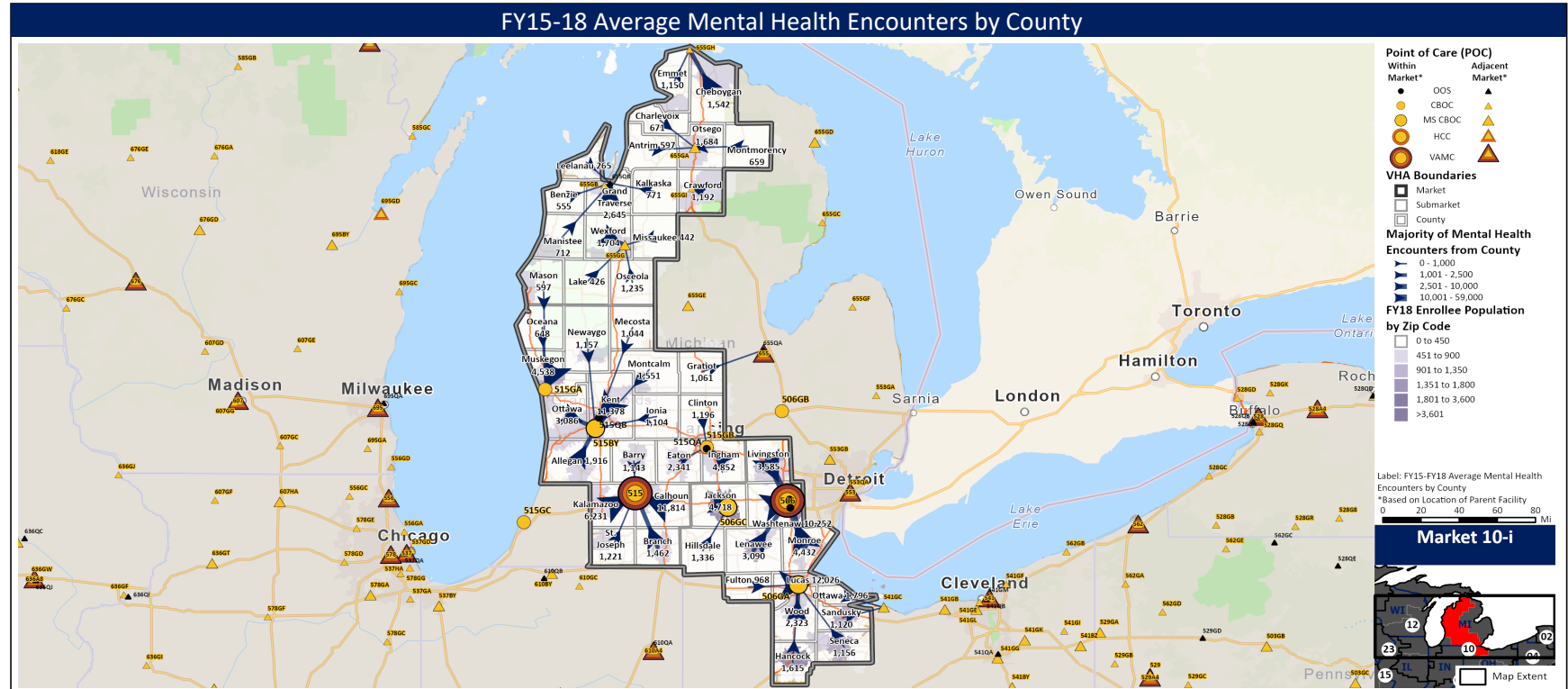
Demand ► Home-Based Primary Care by Provider Type

FY18 HBPC Encounters by Provider Type						
Provider Type	MD	RN	SW	MH	RD	Other
Encounters	627	11,643	1,700	1,243	1,081	4,612
Percentage	3.0%	55.7%	8.1%	5.9%	5.2%	22.1%



VISN 10: MichErie Market

Demand ► Mental Health Encounters – FY15-18



Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.5.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Mental Health Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Allegan,MI	1,917	1,967	(V10) (515BY) Wyoming	54.8%
Antrim,MI	597	637	(V10) (655GA) Gaylord	40.8%
Barry,MI	1,143	1,171	(V10) (515) Battle Creek	63.1%
Benzie,MI	555	506	(V10) (655QB) Grand Traverse	59.7%
Branch,MI	1,462	1,175	(V10) (515) Battle Creek	88.2%
Calhoun,MI	11,815	12,234	(V10) (515) Battle Creek	73.0%
Charlevoix,MI	671	589	(V10) (655GA) Gaylord	55.7%
Cheboygan,MI	1,542	1,449	(V10) (655GH) Cheboygan County	68.2%
Clinton,MI	1,197	1,372	(V10) (515GB) Lansing South	49.1%
Crawford,MI	1,192	1,254	(V10) (655GI) Grayling	53.2%
Eaton,MI	2,341	2,562	(V10) (515GB) Lansing South	41.5%
Emmet,MI	1,150	1,067	(V10) (655GH) Cheboygan County	63.8%
Grand Traverse,MI	2,645	2,929	(V10) (655QB) Grand Traverse	68.0%
Gratiot,MI	1,061	1,169	(V10) (655QA) Saginaw-Barnard Road	51.8%
Hillsdale,MI	1,337	1,188	(V10) (506GC) Jackson-Michigan Center	40.7%
Ingham,MI	4,852	5,191	(V10) (515GB) Lansing South	47.1%
Ionia,MI	1,105	1,117	(V10) (515BY) Wyoming	64.4%
Jackson,MI	4,718	4,490	(V10) (506GC) Jackson-Michigan Center	49.5%



VISN 10: MichErie Market

Demand ► Mental Health Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Kalamazoo,MI	6,231	6,054	(V10) (515) Battle Creek	84.6%
Kalkaska,MI	771	999	(V10) (655QB) Grand Traverse	45.6%
Kent,MI	11,378	11,691	(V10) (515BY) Wyoming	85.4%
Lake,MI	426	512	(V10) (655GG) Cadillac	46.1%
Leelanau,MI	265	276	(V10) (655QB) Grand Traverse	58.0%
Lenawee,MI	3,090	3,361	(V10) (506) Ann Arbor-Michigan	75.0%
Livingston,MI	3,585	3,930	(V10) (506) Ann Arbor-Michigan	84.1%
Manistee,MI	712	757	(V10) (655QB) Grand Traverse	40.2%
Mason,MI	597	722	(V10) (515GA) Muskegon	29.6%
Mecosta,MI	1,045	1,075	(V10) (515BY) Wyoming	32.6%
Missaukee,MI	443	623	(V10) (655GG) Cadillac	66.8%
Monroe,MI	4,432	4,376	(V10) (506) Ann Arbor-Michigan	69.6%
Montcalm,MI	1,551	1,652	(V10) (515BY) Wyoming	45.0%
Montmorency,MI	659	560	(V10) (655GA) Gaylord	33.8%
Muskegon,MI	4,538	5,297	(V10) (515GA) Muskegon	60.3%
Newaygo,MI	1,157	1,151	(V10) (515BY) Wyoming	62.4%
Oceana,MI	648	716	(V10) (515GA) Muskegon	53.2%
Osceola,MI	1,235	1,317	(V10) (655GG) Cadillac	45.3%



VISN 10: MichErie Market

Demand ► Mental Health Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Otsego,MI	1,685	1,899	(V10) (655GA) Gaylord	59.1%
Ottawa,MI	3,086	3,230	(V10) (515BY) Wyoming	72.0%
Saint Joseph,MI	1,221	1,094	(V10) (515) Battle Creek	77.9%
Washtenaw,MI	10,252	9,713	(V10) (506) Ann Arbor-Michigan	87.0%
Wexford,MI	1,704	1,874	(V10) (655GG) Cadillac	59.1%
Fulton,OH	968	758	(V10) (506GA) Toledo	83.9%
Hancock,OH	1,615	1,723	(V10) (506GA) Toledo	49.0%
Lucas,OH	12,026	12,197	(V10) (506GA) Toledo	74.1%
Ottawa,OH	1,796	1,679	(V10) (541GC) Sandusky	51.6%
Sandusky,OH	1,120	1,212	(V10) (541GC) Sandusky	42.7%
Seneca,OH	1,157	970	(V10) (506GA) Toledo	52.5%
Wood,OH	2,323	2,505	(V10) (506GA) Toledo	70.1%
Total	123,010	125,990		



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Top Mental Health Stop Code* Trends FY15-FY18 — Ann Arbor-Michigan

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.
(V10) (506) Ann Arbor-Michigan	(502) MH CLINIC IND	17,211	18,934	18,855	20,367	18.3%	3,714	3,901	3,992	4,299	15.8%	38,131	40,797	39,819	40,505	6.2%
(V10) (506) Ann Arbor-Michigan	(513) SUB USE DISORDER INDIV	6,691	6,755	5,971	7,454	11.4%	849	899	842	873	2.8%	11,600	11,425	10,022	13,481	16.2%
(V10) (506) Ann Arbor-Michigan	(562) PTSD-INDIV	N/A	3,463	6,494	6,563	0.0%	N/A	1,079	1,427	1,456	0.0%	N/A	9,813	18,683	18,041	0.0%
(V10) (506GA) Toledo	(502) MH CLINIC IND	8,000	8,235	8,636	8,276	3.5%	2,258	2,306	2,531	2,476	9.7%	15,353	16,079	16,312	14,146	-7.9%
(V10) (506GA) Toledo	(550) MH CLINIC GROUP	5,479	4,208	3,674	3,339	-39.1%	528	513	464	536	1.5%	2,918	2,230	1,708	1,703	-41.6%
(V10) (506GA) Toledo	(513) SUB USE DISORDER INDIV	1,469	1,502	1,489	1,461	-0.5%	348	303	296	301	-13.5%	2,334	2,023	1,482	1,320	-43.5%
(V10) (506GB) Flint - (V10) Eastern Michigan	(502) MH CLINIC IND	3,149	3,369	3,629	3,311	5.1%	859	862	927	879	2.3%	6,604	6,417	7,633	5,380	-18.5%
(V10) (506GB) Flint - (V10) Eastern Michigan	(550) MH CLINIC GROUP	921	769	562	880	-4.5%	152	110	137	214	40.8%	548	460	340	563	2.7%
(V10) (506GB) Flint - (V10) Eastern Michigan	(560) SUB USE DISORDER GROUP	425	468	542	561	32.0%	59	64	59	64	8.5%	196	238	311	311	58.6%
(V10) (506GC) Jackson-Michigan Center	(502) MH CLINIC IND	2,376	2,394	2,936	2,749	15.7%	566	576	626	648	14.5%	6,709	6,290	7,204	6,705	-0.1%
(V10) (506GC) Jackson-Michigan Center	(550) MH CLINIC GROUP	592	474	301	380	-35.8%	228	235	214	199	-12.7%	344	276	176	222	-35.5%
(V10) (506GC) Jackson-Michigan Center	(562) PTSD-INDIV	N/A	126	177	246	0.0%	N/A	30	51	52	0.0%	N/A	0	2	6	0.0%
(V10) (506QA) Ann Arbor-Packard Road	(502) MH CLINIC IND	N/A	N/A	1	N/A	0.0%	N/A	N/A	1	N/A	0.0%	N/A	N/A	2	N/A	0.0%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

*Includes top 3 stop codes, where applicable (some sites reported less than 3)

Source: VSSC Encounters Cube – Public Grouping (Mental Health)

2.7.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Demand ► Top Mental Health Stop Code* Trends FY15-FY18 — Battle Creek

Facility	Stop Code	Encounters					Unique Patients					CPT Work RVU				
		FY15	FY16	FY17	FY18	4 Yr Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.	FY15	FY16	FY17	FY18	4 Yr. Ch.
(V10) (515) Battle Creek	(502) MH CLINIC IND	12,859	13,696	14,631	15,114	17.5%	2,908	3,698	3,910	3,827	31.6%	22,619	21,142	22,554	24,073	6.4%
(V10) (515) Battle Creek	(562) PTSD-INDIV	4,195	3,569	3,998	3,762	-10.3%	338	810	819	758	124.3%	8,103	7,010	8,215	7,519	-7.2%
(V10) (515) Battle Creek	(560) SUB USE DISORDER GROUP	8,185	2,359	1,462	2,271	-72.3%	601	298	285	247	-58.9%	2,841	971	636	825	-71.0%
(V10) (515BU) Battle Creek Domiciliary	(587) Residential Rehabilitation Treatment Program (RRTP)- Group	N/A	12,332	14,704	13,185	0.0%	N/A	451	548	497	0.0%	N/A	5,655	6,727	5,134	0.0%
(V10) (515BY) Wyoming	(502) MH CLINIC IND	10,289	13,236	13,535	13,689	33.0%	2,469	2,791	2,762	2,738	10.9%	24,307	23,126	23,800	25,908	6.6%
(V10) (515BY) Wyoming	(534) MH INTGRTD CARE IND	1,731	1,980	2,151	2,388	38.0%	896	1,132	1,193	1,175	31.1%	3,743	3,202	3,539	3,715	-0.8%
(V10) (515BY) Wyoming	(550) MH CLINIC GROUP	831	1,129	1,493	1,463	76.1%	118	165	178	171	44.9%	486	488	665	475	-2.3%
(V10) (515GA) Muskegon	(502) MH CLINIC IND	3,150	2,524	3,711	3,941	25.1%	801	767	851	873	9.0%	6,756	3,795	5,871	7,248	7.3%
(V10) (515GA) Muskegon	(560) SUB USE DISORDER GROUP	102	87	122	407	299.0%	20	10	27	25	25.0%	1	0	0	0	-98.3%
(V10) (515GA) Muskegon	(550) MH CLINIC GROUP	175	340	307	331	89.1%	40	67	60	47	17.5%	103	24	4	118	14.5%
(V10) (515GB) Lansing South	(502) MH CLINIC IND	3,087	4,077	4,182	4,802	55.6%	938	1,024	1,070	1,160	23.7%	6,746	9,215	9,384	10,453	54.9%
(V10) (515GB) Lansing South	(534) MH INTGRTD CARE IND	N/A	N/A	6	405	0.0%	N/A	N/A	6	106	0.0%	N/A	N/A	9	651	0.0%
(V10) (515GB) Lansing South	(550) MH CLINIC GROUP	17	29	N/A	N/A	-100.0%	8	14	N/A	N/A	-100.0%	0	20	N/A	N/A	0.0%
(V10) (515GC) Benton Harbor - (V10) Indiana	(502) MH CLINIC IND	2,678	2,666	3,255	3,504	30.8%	597	615	637	563	-5.7%	7,053	7,037	6,157	3,976	-43.6%
(V10) (515GC) Benton Harbor - (V10) Indiana	(560) SUB USE DISORDER GROUP	53	39	351	485	815.1%	7	9	24	26	271.4%	0	2	0	4	0.0%
(V10) (515GC) Benton Harbor - (V10) Indiana	(550) MH CLINIC GROUP	52	258	307	136	161.5%	31	55	47	34	9.7%	0	85	141	61	0.0%
(V10) (515PA) Battle Creek PR RTP	(587) Residential Rehabilitation Treatment Program (RRTP)- Group	N/A	122	136	194	0.0%	N/A	38	17	28	0.0%	N/A	72	77	114	0.0%

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

*Includes top 3 stop codes, where applicable (some sites reported less than 3)

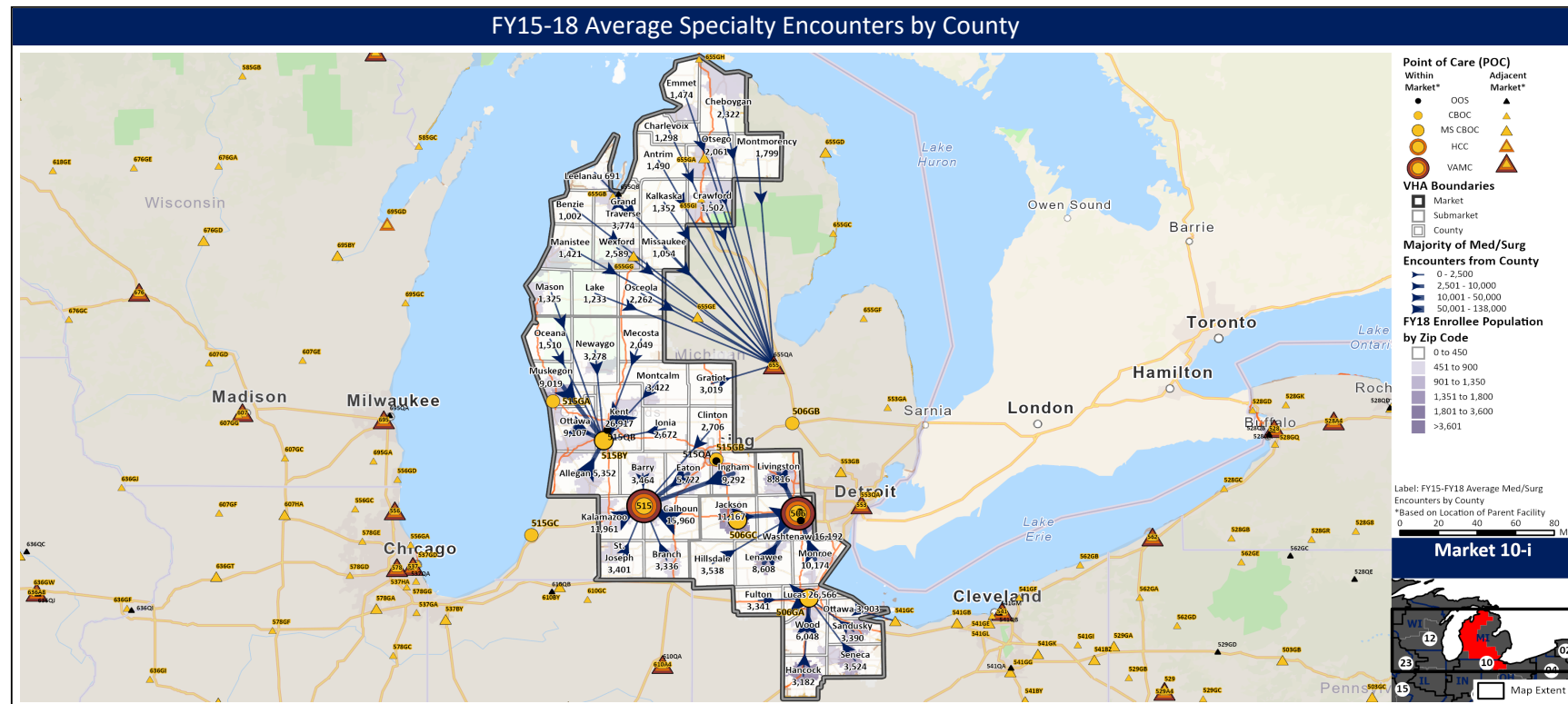
Source: VSSC Encounters Cube – Public Grouping (Mental Health)

2.7.V10.MichErie.515



VISN 10: MichErie Market

Demand ► Specialty Encounters – FY15-18



Source: 1. VSSC Encounters Cube 2. Geocoded Enrollee File FY18Q4

2.8.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Specialty Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Washtenaw,MI	16,192	15,813	(V10) (506) Ann Arbor-Michigan	82.4%
Osceola,MI	2,262	2,228	(V10) (655) Saginaw-Michigan	41.5%
Saint Joseph,MI	3,401	3,389	(V10) (515) Battle Creek	73.0%
Mason,MI	1,325	1,245	(V10) (515BY) Wyoming	47.2%
Mecosta,MI	2,049	2,157	(V10) (515BY) Wyoming	39.8%
Oceana,MI	1,510	1,544	(V10) (515BY) Wyoming	63.1%
Otsego,MI	2,061	1,952	(V10) (655) Saginaw-Michigan	48.5%
Ottawa,MI	9,107	9,821	(V10) (515BY) Wyoming	79.1%
Wexford,MI	2,589	2,635	(V10) (655) Saginaw-Michigan	37.1%
Eaton,MI	5,723	6,065	(V10) (515) Battle Creek	60.3%
Emmet,MI	1,474	1,436	(V10) (655) Saginaw-Michigan	50.9%
Grand Traverse,MI	3,774	4,130	(V10) (655QB) Grand Traverse	26.5%
Gratiot,MI	3,019	3,168	(V10) (655) Saginaw-Michigan	75.2%
Hillsdale,MI	3,538	3,906	(V10) (506) Ann Arbor-Michigan	68.0%
Ingham,MI	9,292	8,935	(V10) (515) Battle Creek	41.1%
Ionia,MI	2,673	2,529	(V10) (515BY) Wyoming	61.5%
Jackson,MI	11,167	11,875	(V10) (506) Ann Arbor-Michigan	67.7%
Kalamazoo,MI	11,961	12,530	(V10) (515) Battle Creek	77.1%



VISN 10: MichErie Market

Demand ► Specialty Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Kalkaska,MI	1,353	1,523	(V10) (655) Saginaw-Michigan	28.9%
Kent,MI	26,917	27,844	(V10) (515BY) Wyoming	81.5%
Lake,MI	1,233	1,101	(V10) (655) Saginaw-Michigan	27.7%
Leelanau,MI	691	878	(V10) (655) Saginaw-Michigan	26.8%
Lenawee,MI	8,608	8,632	(V10) (506) Ann Arbor-Michigan	77.1%
Livingston,MI	8,817	8,976	(V10) (506) Ann Arbor-Michigan	82.5%
Manistee,MI	1,421	1,398	(V10) (655) Saginaw-Michigan	30.8%
Missaukee,MI	1,054	973	(V10) (655) Saginaw-Michigan	36.8%
Monroe,MI	10,174	10,602	(V10) (506) Ann Arbor-Michigan	60.6%
Montcalm,MI	3,423	3,419	(V10) (515BY) Wyoming	56.0%
Montmorency,MI	1,799	1,821	(V10) (655) Saginaw-Michigan	48.3%
Muskegon,MI	9,019	8,478	(V10) (515BY) Wyoming	66.1%
Newaygo,MI	3,278	3,564	(V10) (515BY) Wyoming	68.7%
Charlevoix,MI	1,298	1,374	(V10) (655) Saginaw-Michigan	43.3%
Cheboygan,MI	2,323	2,411	(V10) (655) Saginaw-Michigan	49.9%
Clinton,MI	2,707	2,606	(V10) (515) Battle Creek	45.2%
Crawford,MI	1,503	1,355	(V10) (655) Saginaw-Michigan	51.3%
Branch,MI	3,336	3,557	(V10) (515) Battle Creek	68.0%



VISN 10: MichErie Market

Demand ► Specialty Encounters — FY15-18, cont.

County	FY15-18 Avg Encounters	FY18 Encounters	Most Commonly Used Facility	% of Encounters
Calhoun,MI	15,960	15,956	(V10) (515) Battle Creek	77.5%
Benzie,MI	1,002	1,017	(V10) (655) Saginaw-Michigan	28.1%
Antrim,MI	1,490	1,321	(V10) (655) Saginaw-Michigan	38.8%
Barry,MI	3,464	3,909	(V10) (515) Battle Creek	55.9%
Allegan,MI	5,352	5,529	(V10) (515BY) Wyoming	51.6%
Fulton,OH	3,341	3,298	(V10) (506GA) Toledo	64.3%
Hancock,OH	3,183	3,529	(V10) (506GA) Toledo	54.4%
Lucas,OH	26,566	25,575	(V10) (506GA) Toledo	65.9%
Ottawa,OH	3,903	4,100	(V10) (541GC) Sandusky	27.4%
Sandusky,OH	3,390	3,541	(V10) (506GA) Toledo	38.1%
Seneca,OH	3,524	3,282	(V10) (506GA) Toledo	51.7%
Wood,OH	6,048	6,043	(V10) (506GA) Toledo	66.1%
Total	259,287	262,970		



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
(V10) (506) Ann Arbor-Michigan	154,206	155,493	155,800	137,494	-10.8%	206,078	209,144	215,093	207,324	0.6%
Allergy and Immunology	N/A	N/A	N/A	44	N/A	N/A	N/A	N/A	90	N/A
Audiology & Speech Pathology	13,633	13,238	13,564	1,984	-85.4%	10,419	9,231	8,082	2,225	-78.6%
Cardiology	11,539	11,126	11,525	13,007	12.7%	19,076	17,032	17,379	21,249	11.4%
Clinical Pharmacology	7,937	8,080	7,554	6,889	-13.2%	289	4	5	2	-99.2%
Critical Care / Pulmonary Disease	2,462	2,253	2,912	3,257	32.3%	5,427	4,653	6,224	6,543	20.6%
Dermatology	9,989	10,099	10,152	4,055	-59.4%	13,069	13,603	14,500	3,511	-73.1%
Endocrinology	1,995	2,056	2,191	2,352	17.9%	3,802	3,745	3,819	3,810	0.2%
Gastroenterology	5,473	5,871	6,048	6,014	9.9%	9,494	10,314	10,641	11,452	20.6%
Geriatric Medicine	715	685	712	612	-14.4%	665	770	781	725	9.1%
Hematology-Oncology	17,027	15,659	14,798	15,791	-7.3%	27,537	25,410	30,735	34,259	24.4%
Infectious Disease	1,523	1,436	1,656	1,516	-0.5%	2,448	2,309	2,648	2,398	-2.0%
Internal Medicine	4,722	3,150	2,582	406	-91.4%	750	635	173	163	-78.3%
Nephrology	1,475	1,565	1,591	1,841	24.8%	2,647	2,737	2,737	3,050	15.2%
Neurological Surgery	1,903	2,279	2,591	2,171	14.1%	2,328	2,610	3,471	3,163	35.9%
Neurology	3,149	3,291	3,231	3,226	2.4%	6,032	6,777	6,290	5,989	-0.7%
Nutrition	1,996	2,070	1,876	1,729	-13.4%	972	624	337	339	-65.1%
Obstetrics & Gynecology	813	955	948	924	13.7%	2,094	2,639	2,615	2,471	18.0%
Ophthalmology	19,179	19,491	19,415	19,019	-0.8%	31,361	31,503	29,716	31,054	-1.0%
Optometry	4,240	4,186	4,223	4,550	7.3%	8,046	8,272	9,160	8,427	4.7%
Orthopaedic Surgery	2,161	1,816	2,047	2,189	1.3%	1,577	1,536	2,084	2,452	55.4%

*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Otolaryngology	5,880	5,843	5,581	5,396	-8.2%	10,460	12,072	10,965	11,148	6.6%
Pain Medicine	1,986	3,378	4,965	4,419	122.5%	3,813	5,508	7,119	5,958	56.2%
Physical Medicine & Rehabilitation	18,017	20,448	18,963	18,656	3.5%	20,118	22,498	20,258	20,818	3.5%
Plastic Surgery	2,589	2,767	2,635	2,668	3.1%	3,725	4,272	4,220	4,930	32.3%
Polytrauma	543	480	381	371	-31.7%	913	848	715	729	-20.1%
Rheumatology	1,657	1,760	1,680	1,828	10.3%	2,498	2,763	2,869	3,261	30.6%
SCI	155	171	149	163	5.2%	246	272	242	265	7.8%
Surgery	2,750	3,072	3,351	2,954	7.4%	4,522	5,257	6,015	5,155	14.0%
Thoracic Surgery	464	558	600	629	35.6%	692	774	957	894	29.1%
Urology	5,472	4,983	5,296	5,504	0.6%	7,956	7,467	7,362	7,309	-8.1%
Vascular Surgery	2,762	2,727	2,583	3,330	20.6%	3,103	3,008	2,975	3,487	12.4%
(V10) (506GA) Toledo	32,981	34,607	33,137	31,481	-4.5%	31,741	31,491	27,834	27,288	-14.0%
Audiology & Speech Pathology	5,870	6,269	6,553	6,816	16.1%	3,979	3,021	2,853	2,941	-26.1%
Cardiology	277	538	365	242	-12.6%	413	738	486	334	-19.2%
Clinical Pharmacology	5,051	4,478	4,408	3,526	-30.2%	3	6	2	1	-84.0%
Dermatology	927	911	791	421	-54.6%	1,563	1,572	928	113	-92.8%
Gastroenterology	N/A	55	159	104	N/A	N/A	0	2	1	N/A
Hematology-Oncology	50	42	32	32	-36.0%	0	0	0	0	N/A
Internal Medicine	750	985	830	716	-4.5%	3	165	68	3	-13.9%
Nutrition	707	546	660	551	-22.1%	335	257	330	276	-17.8%
Optometry	6,204	6,135	6,309	6,323	1.9%	10,982	10,345	10,647	11,029	0.4%

*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie#2



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Otolaryngology	9	13	22	9	0.0%	0	0	0	0	N/A
Physical Medicine & Rehabilitation	13,129	14,546	12,869	12,650	-3.6%	14,462	15,387	12,517	12,589	-12.9%
Plastic Surgery	N/A	48	90	34	N/A	N/A	0	0	0	N/A
Urology	7	41	49	57	714.3%	0	0	0	2	N/A
(V10) (506GB) Flint - (V10) Eastern Michigan	1,134	1,122	1,323	1,246	9.9%	77	54	56	13	-83.5%
Cardiology	3	4	10	30	900.0%	0	0	0	0	N/A
Clinical Pharmacology	670	666	765	799	19.3%	41	3	1	0	-100.0%
Dermatology	138	187	194	213	54.3%	0	0	0	0	-100.0%
Gastroenterology	N/A	3	59	34	N/A	N/A	0	11	5	N/A
Geriatric Medicine	16	22	3	N/A	-100.0%	0	0	0	N/A	N/A
Hematology-Oncology	18	18	7	12	-33.3%	0	0	0	0	N/A
Internal Medicine	98	35	59	31	-68.4%	0	0	0	0	N/A
Nutrition	189	174	208	119	-37.0%	36	51	44	7	-80.4%
Urology	2	13	18	8	300.0%	0	0	0	0	N/A
(V10) (506GC) Jackson-Michigan Center	884	1,701	1,684	3,599	307.1%	134	101	5	934	599.0%
Audiology & Speech Pathology	N/A	N/A	N/A	1,989	N/A	N/A	N/A	N/A	932	N/A
Clinical Pharmacology	272	1,062	1,083	1,074	294.9%	0	7	0	0	-28.0%
Dermatology	315	362	358	344	9.2%	0	1	1	0	N/A
Geriatric Medicine	16	11	4	N/A	-100.0%	3	0	0	N/A	-100.0%
Nutrition	281	255	220	174	-38.1%	131	93	3	1	-99.6%
Urology	N/A	11	19	18	N/A	N/A	0	1	1	N/A

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Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

Specialty Title	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
(V10) (506QA) Ann Arbor-Packard Road	N/A	N/A	402	11,783	N/A	N/A	N/A	28	4,993	N/A
Audiology & Speech Pathology	N/A	N/A	N/A	9,854	N/A	N/A	N/A	N/A	4,883	N/A
Internal Medicine	N/A	N/A	402	1,929	N/A	N/A	N/A	28	110	N/A
(V10) (506QB) Green Road	N/A	N/A	N/A	5,552	N/A	N/A	N/A	N/A	10,019	N/A
Dermatology	N/A	N/A	N/A	5,119	N/A	N/A	N/A	N/A	9,269	N/A
Podiatry	N/A	N/A	N/A	433	N/A	N/A	N/A	N/A	750	N/A
(V10) (515) Battle Creek	50,454	52,162	53,868	49,292	-2.3%	50,777	52,428	54,785	50,853	0.1%
Audiology & Speech Pathology	6,397	6,981	7,111	6,975	9.0%	3,693	3,051	2,901	2,699	-26.9%
Cardiology	2,255	2,445	2,104	1,982	-12.1%	2,321	2,736	2,270	2,154	-7.2%
Clinical Pharmacology	1,466	1,315	1,232	1,054	-28.1%	0	0	0	0	N/A
Dermatology	186	80	115	161	-13.4%	0	0	0	0	-100.0%
Endocrinology	57	53	57	101	77.2%	0	0	0	2	N/A
Gastroenterology	8	18	25	20	150.0%	0	0	0	0	N/A
Geriatric Medicine	385	351	435	453	17.7%	0	2	3	289	N/A
Hematology-Oncology	18	21	24	22	22.2%	0	0	0	0	N/A
Infectious Disease	1,717	1,205	1,141	961	-44.0%	1,319	929	1,084	835	-36.7%
Internal Medicine	4,446	4,865	4,290	3,915	-11.9%	1,370	1,941	2,438	3,034	121.4%
Neurological Surgery	N/A	2	15	18	N/A	N/A	0	0	0	N/A
Neurology	982	1,111	951	952	-3.1%	1,499	1,838	1,520	1,572	4.9%
Nutrition	2,336	2,292	2,091	2,054	-12.1%	1,654	1,810	1,941	1,904	15.2%
Optometry	7,940	8,029	9,007	9,132	15.0%	13,494	14,453	16,048	16,143	19.6%

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Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie#4



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Orthopaedic Surgery	N/A	N/A	17	16	N/A	N/A	N/A	0	0	N/A
Otolaryngology	18	18	28	22	22.2%	0	0	0	0	N/A
Pain Medicine	N/A	649	1,229	1,091	N/A	N/A	727	1,350	1,362	N/A
Physical Medicine & Rehabilitation	16,729	15,981	15,825	12,568	-24.9%	17,636	16,712	15,695	13,636	-22.7%
Podiatry	4,558	5,849	7,209	6,809	49.4%	6,382	7,000	8,315	6,014	-5.8%
Polytrauma	183	84	85	65	-64.5%	383	115	75	56	-85.3%
SCI	89	121	153	222	149.4%	129	190	131	272	110.2%
Urology	684	692	724	699	2.2%	898	925	1,014	882	-1.8%
(V10) (515BY) Wyoming	35,647	38,554	45,270	44,706	25.4%	41,449	47,432	53,405	52,229	26.0%
Audiology & Speech Pathology	6,275	6,810	8,553	8,623	37.4%	4,610	3,774	4,309	3,139	-31.9%
Cardiology	91	628	1,562	1,201	1219.8%	0	908	1,969	1,554	863016.7%
Clinical Pharmacology	932	633	569	122	-86.9%	0	0	0	0	-100.0%
Critical Care / Pulmonary Disease	30	366	486	23	-23.3%	65	836	871	20	-68.9%
Dermatology	1,690	474	656	796	-52.9%	1,853	0	1	0	-100.0%
Endocrinology	238	252	314	337	41.6%	1	2	0	6	510.3%
Gastroenterology	6	690	792	619	10216.7%	0	1,455	1,412	958	N/A
Hematology-Oncology	8	21	25	24	200.0%	0	0	0	0	N/A
Infectious Disease	916	624	632	515	-43.8%	365	316	588	507	39.0%
Internal Medicine	163	342	2,042	1,492	815.3%	331	751	1,506	1,276	285.8%
Neurology	394	346	362	410	4.1%	625	588	614	682	9.2%
Nutrition	1,085	1,464	1,446	1,427	31.5%	977	1,657	1,882	1,603	64.0%

*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie#5



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Obstetrics & Gynecology	6	1	2	193	3116.7%	0	0	4	396	N/A
Optometry	9,095	10,043	9,764	9,886	8.7%	17,497	19,379	18,792	18,942	8.3%
Otolaryngology	22	10	26	10	-54.5%	0	0	0	0	N/A
Pain Medicine	44	848	2,009	1,839	4079.5%	23	985	3,300	2,953	12942.9%
Physical Medicine & Rehabilitation	9,730	9,540	10,310	10,618	9.1%	10,378	11,247	11,715	13,155	26.8%
Podiatry	4,348	4,799	5,308	6,169	41.9%	4,119	4,735	5,820	6,467	57.0%
Rheumatology	3	16	29	27	800.0%	0	0	0	0	N/A
SCI	34	43	46	31	-8.8%	62	64	70	49	-21.3%
Surgery	1	3	12	22	2100.0%	0	0	0	0	N/A
Urology	536	601	325	322	-39.9%	542	736	551	522	-3.7%
(V10) (515GA) Muskegon	1,577	1,680	1,955	1,392	-11.7%	2	146	289	263	14407.2%
Audiology & Speech Pathology	70	87	72	5	-92.9%	0	1	0	0	N/A
Cardiology	62	72	79	71	14.5%	0	0	0	0	-100.0%
Clinical Pharmacology	980	765	831	356	-63.7%	0	0	0	0	-100.0%
Dermatology	273	341	349	416	52.4%	0	1	0	0	N/A
Nutrition	84	354	531	445	429.8%	0	144	289	261	N/A
Pain Medicine	N/A	3	26	35	N/A	N/A	0	0	0	N/A
Physical Medicine & Rehabilitation	108	58	67	64	-40.7%	1	1	0	1	-31.0%
(V10) (515GB) Lansing South	1,354	1,241	1,172	1,097	-19.0%	0	2	24	43	N/A
Cardiology	18	21	42	25	38.9%	0	0	0	0	N/A
Clinical Pharmacology	783	699	668	648	-17.2%	0	0	0	0	N/A

*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie#6



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Dermatology	293	227	166	162	-44.7%	0	1	0	0	N/A
Endocrinology	80	63	49	57	-28.8%	0	1	0	0	N/A
Nutrition	180	231	235	183	1.7%	0	0	1	0	N/A
Polytrauma	N/A	N/A	12	22	N/A	N/A	N/A	23	43	N/A
(V10) (515GC) Benton Harbor - (V10) Indiana	1,025	942	942	800	-22.0%	1	0	0	0	-46.7%
Cardiology	26	24	14	11	-57.7%	0	0	0	0	N/A
Clinical Pharmacology	680	615	564	404	-40.6%	0	0	0	0	N/A
Dermatology	65	57	91	82	26.2%	1	0	0	0	-46.7%
Endocrinology	49	49	38	22	-55.1%	0	0	0	0	N/A
Gastroenterology	3	8	13	17	466.7%	0	0	0	0	N/A
Hematology-Oncology	11	16	18	23	109.1%	0	0	0	0	N/A
Nutrition	191	168	185	238	24.6%	0	0	0	0	N/A
Pain Medicine	N/A	5	19	3	N/A	N/A	0	0	0	N/A
(V10) (655GA) Gaylord	1,389	1,648	1,570	1,504	8.3%	26	70	147	117	341.1%
Audiology & Speech Pathology	110	196	126	161	46.4%	0	0	0	0	N/A
Cardiology	10	18	18	16	60.0%	4	6	8	2	-41.1%
Clinical Pharmacology	914	817	735	720	-21.2%	1	2	1	0	-100.0%
Dermatology	143	174	156	171	19.6%	0	0	0	0	N/A
Infectious Disease	N/A	3	5	16	N/A	N/A	0	0	1	N/A
Nutrition	78	80	57	55	-29.5%	0	0	1	1	N/A
Podiatry	134	360	473	365	172.4%	21	61	138	113	429.3%

*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie#7



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
(V10) (655GB) Traverse City	2,617	1,755	624	796	-69.6%	3,961	2,506	14	14	-99.6%
Audiology & Speech Pathology	N/A	N/A	17	109	N/A	N/A	N/A	0	0	N/A
Cardiology	12	16	22	27	125.0%	4	6	8	13	219.8%
Clinical Pharmacology	N/A	N/A	283	317	N/A	N/A	N/A	2	0	N/A
Critical Care / Pulmonary Disease	16	13	15	13	-18.8%	12	1	1	0	-98.6%
Dermatology	159	144	173	241	51.6%	2	2	0	0	-88.1%
Endocrinology	15	33	30	N/A	-100.0%	2	0	2	N/A	-100.0%
Nutrition	74	47	48	48	-35.1%	0	0	0	1	55.9%
Pain Medicine	10	25	20	34	240.0%	0	0	0	0	N/A
Physical Medicine & Rehabilitation	2,330	1,472	N/A	N/A	-100.0%	3,941	2,497	N/A	N/A	-100.0%
Urology	1	5	16	7	600.0%	0	0	0	0	N/A
(V10) (655GG) Cadillac	3,212	3,907	5,112	5,220	62.5%	1,198	1,308	1,952	1,850	54.4%
Audiology & Speech Pathology	2,688	3,366	4,149	4,021	49.6%	1,189	1,297	1,689	1,516	27.4%
Cardiology	13	14	15	20	53.8%	7	3	4	4	-40.4%
Clinical Pharmacology	300	305	374	344	14.7%	0	0	1	2	388.6%
Dermatology	103	78	55	80	-22.3%	0	0	0	0	N/A
Endocrinology	7	16	23	32	357.1%	2	0	2	3	85.7%
Infectious Disease	N/A	6	3	22	N/A	N/A	0	0	3	N/A
Nutrition	84	86	90	65	-22.6%	0	0	0	0	N/A
Podiatry	17	36	403	636	3641.2%	0	9	255	322	N/A
(V10) (655GH) Cheboygan County	341	348	466	520	52.5%	11	8	10	12	5.7%

*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie#8



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18, cont.

	Encounters*				4 Yr. Ch.	CPT Work RVU				4 Yr. Ch.
Specialty Title	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
Audiology & Speech Pathology	N/A	N/A	101	105	N/A	N/A	N/A	0	0	N/A
Cardiology	20	27	18	17	-15.0%	6	8	6	11	98.2%
Clinical Pharmacology	134	142	180	250	86.6%	5	0	1	0	-96.2%
Dermatology	20	26	52	72	260.0%	0	0	1	0	166.7%
Endocrinology	5	6	19	N/A	-100.0%	1	1	2	N/A	-100.0%
Nutrition	160	94	85	57	-64.4%	0	0	0	0	-100.0%
Pain Medicine	2	53	11	19	850.0%	0	0	0	0	N/A
(V10) (655GI) Grayling	963	1,017	910	830	-13.8%	152	76	79	65	-57.2%
Audiology & Speech Pathology	4	147	76	88	2100.0%	1	1	0	0	-83.0%
Cardiology	7	22	17	8	14.3%	2	4	5	2	0.0%
Clinical Pharmacology	339	381	360	340	0.3%	0	0	0	0	-100.0%
Dermatology	47	54	83	61	29.8%	0	0	0	0	N/A
Endocrinology	5	N/A	17	N/A	-100.0%	2	N/A	0	N/A	-100.0%
Infectious Disease	N/A	10	25	16	N/A	N/A	0	1	0	N/A
Nutrition	70	93	91	74	5.7%	0	0	0	0	N/A
Pain Medicine	N/A	2	2	36	N/A	N/A	0	0	0	N/A
Podiatry	491	308	239	207	-57.8%	147	71	73	63	-57.0%
(V10) (655QB) Grand Traverse	N/A	882	1,578	2,422	N/A	N/A	1,528	2,106	3,091	N/A
Physical Medicine & Rehabilitation	N/A	882	1,578	2,422	N/A	N/A	1,528	2,106	3,091	N/A

*Specialties were only included if there were greater than 15 encounters in any of the past four years.

Note: Data limited to workload from patients originating from within the counties of Phase Two VISNs in the Market Assessments

Source: VSSC Encounters Cube – Public Grouping (Specialty Care)

2.10.V10.MichErie#9



VISN 10: MichErie Market

Demand ► Specialty Care Stop Code Trends FY15-18 – Dental

Dental*	Visits				4 Yr. Ch.	RVU Equivalent				4 Yr. Ch.
Facility	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	
(V10) (506) Ann Arbor	10,005	9,716	10,005	9,434	-5.7%	786,471	745,286	778,214	752,797	-4.3%
(V10) (515) Battle Creek	10,383	10,876	12,355	12,977	25.0%	1,189,520	1,262,685	1,263,732	1,241,200	4.3%
(V10) (506GA) Toledo	2,986	2,854	2,986	3,162	5.9%	215,527	209,777	237,141	254,248	18.0%
(V10) (515BY) Wyoming	4,974	6,496	6,511	6,191	24.5%	342,946	507,430	497,514	480,702	40.2%

*Dental Data is derived from the Office of Dentistry's dataset and represents Visits, RVU Equivalents, and Unique Patients.



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► **Telehealth — FY18 Telehealth Utilization**

Telehealth Utilization	Ann Arbor-Michigan	National
Telehealth Use (Tele1)	12.6%	13.1%
Home Telehealth (Tele2)	1.2%	2.3%
Clinical Video Telehealth (Tele3)	2.8%	6.6%
Store and Forward Telehealth (Tele4)	9.1%	5.3%
eConsult (SC10)	7.7%	8.3%
SCAN ECHO (SC20)	0.5%	0.0%
Video Telehealth to Off Site Patients (Tele9)	0.4%	0.5%

Note: Telehealth utilization is based on percentage of unique patients leveraging telehealth-related tools/technology.

Source: VSSC Telehealth Dashboard - Connected Care

2.15.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Demand ► **Telehealth — FY18 Telehealth Utilization**

Telehealth Utilization	Battle Creek	National
Telehealth Use (Tele1)	13.4%	13.1%
Home Telehealth (Tele2)	3.1%	2.3%
Clinical Video Telehealth (Tele3)	7.6%	6.6%
Store and Forward Telehealth (Tele4)	4.8%	5.3%
eConsult (SC10)	1.8%	8.3%
Video Telehealth to Off Site Patients (Tele9)	0.8%	0.5%

Note: Telehealth utilization is based on percentage of unique patients leveraging telehealth-related tools/technology.

Source: VSSC Telehealth Dashboard - Connected Care

2.15.V10.MichErie.515



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Telehealth Encounters by Patient and Provider Site* — Ann Arbor-Michigan

Patient Site	FY15	FY16	FY17	FY18	4 Yr Avg
(V10) (506) Ann Arbor-Michigan	1,945	2,218	2,573	2,949	2,421
(V10) (506GA) Toledo	1,629	1,786	2,271	2,049	1,933
(V10) (506GB) Flint - (V10) Eastern Michig...	995	1,240	1,066	1,527	1,207
(V10) (506GC) Jackson-Michigan Center	977	1,281	1,322	1,255	1,208
(V10) (506QA) Ann Arbor-Packard Road				9	9
(V10) (506QB) Green Road				14	14
Total	5,546	6,525	7,232	7,803	6,776

Ann Arbor-Michigan VAMC & Treating Facility Encounters by Provider Site

Provider Site	FY15-18 Total Encounters	% of Total Encounters
(V10) (506) Ann Arbor-Michigan	22,396	82.5%
(V10) (506GA) Toledo	3,411	12.6%
(V10) (506QB) Green Road	861	3.2%
(V10) (553) Detroit-Michigan	269	1.0%
(V19) (660) Salt Lake City	77	0.3%
(V10) (506GC) Jackson-Michigan Ce...	36	0.1%
(V10) (506GB) Flint	31	0.1%
(V10) (506GB) Flint - (V10) Eastern ...	31	0.1%
(V10) (506QA) Ann Arbor-Packard R...	9	0.0%
(V01) (650) Providence	7	0.0%
(V01) (689) West Haven	4	0.0%
(V10) (541) Cleveland-Ohio	3	0.0%
(V10) (552) Dayton	1	0.0%
(V21) (662) San Francisco-California	1	0.0%

Note: Patient site indicates the clinic location by primary stop code where the patient receives the service

*Includes 4 Types: CVT General (690/692,693,699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695,696)

Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes, and Telehealth Type Report



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Telehealth Encounters by Specialty*

	Specialties	FY15	FY16	FY17	FY18	4 Yr Avg
Ann Arbor-Michigan	Physical Medicine & Rehabilitation	415	428	451	369	416
	Pain Medicine	N/A	1	N/A	N/A	0
	Ophthalmology	1,484	1,248	1,201	1,254	1,297
	Nutrition	204	370	206	256	259
	Mental Health	1,353	2,224	2,773	3,209	2,390
	Dermatology	1,706	1,776	1,859	1,811	1,788
	Critical Care / Pulmonary Disease	106	17	111	113	87
	Clinical Pharmacology	10	5	1	237	63
	All Other Specialties	257	456	630	554	474
	Total	5,535	6,525	7,232	7,803	6,774

*Includes 4 Types: CVT General (690/692, 693, 699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695, 696)

Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes and Telehealth Type Report

2.29.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Demand ► Telehealth Encounters by Patient and Provider Site* — Battle Creek

Patient Site	FY15	FY16	FY17	FY18	4 Yr Avg
(V10) (515) Battle Creek	944	1,500	1,409	2,005	1,464
(V10) (515BU) Battle Creek Domiciliary		13	10	5	9
(V10) (515BY) Wyoming	1,765	2,204	2,355	2,653	2,244
(V10) (515GA) Muskegon	2,477	2,650	2,505	2,206	2,459
(V10) (515GB) Lansing South	2,486	2,339	2,686	2,699	2,552
(V10) (515GC) Benton Harbor - (V10) Indi...	1,960	1,968	1,979	1,821	1,932
(V10) (515QB) Century Avenue				3	3
Total	9,632	10,674	10,944	11,392	10,660

Battle Creek VAMC & Treating Facility Encounters by Provider Site

Provider Site	FY15-18 Total Encounters	% of Total Encounters
(V10) (515) Battle Creek	24,074	56.3%
(V10) (515BY) Wyoming	9,349	21.9%
(V10) (506) Ann Arbor-Michigan	5,686	13.3%
(V10) (553) Detroit-Michigan	1,691	4.0%
(V10) (506QB) Green Road	736	1.7%
(V10) (515GB) Lansing South	575	1.3%
(V10) (515GA) Muskegon	238	0.6%
(V10) (515GC) Benton Harbor	105	0.2%
(V10) (515GC) Benton Harbor - (V10...	105	0.2%
(V10) (610) Marion-Indiana	72	0.2%
(V19) (660) Salt Lake City	72	0.2%
(V10) (610BU) Marion VADOM	20	0.0%
(V12) (550) Danville-Illinois	14	0.0%
(V10) (515BU) Battle Creek Domicili...	3	0.0%
(V10) (515QB) Century Avenue	3	0.0%
(V21) (662) San Francisco-California	2	0.0%
(V10) (541) Cleveland-Ohio	1	0.0%
(V12) (578) Hines	1	0.0%

Note: Patient site indicates the clinic location by primary stop code where the patient receives the service

*Includes 4 Types: CVT General (690/692,693,699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695,696)

Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes, and Telehealth Type Report



VISN 10: MichErie Market — Battle Creek

Demand ► Telehealth Encounters by Specialty*

	Specialties	FY15	FY16	FY17	FY18	4 Yr Avg
Battle Creek	Physical Medicine & Rehabilitation	139	139	133	150	140
	Pain Medicine	14	152	224	254	161
	Ophthalmology	543	454	276	652	481
	Nutrition	1,996	2,272	2,682	2,059	2,252
	Mental Health	446	794	1,150	2,630	1,255
	Endocrinology	197	179	153	147	169
	Dermatology	996	1,188	1,391	1,623	1,300
	Critical Care / Pulmonary Disease	779	600	535	530	611
	Clinical Pharmacology	3,364	3,690	3,189	2,205	3,112
	All Other Specialties	1,158	1,206	1,211	1,141	1,179
	Total	9,632	10,674	10,944	11,391	10,660

*Includes 4 Types: CVT General (690/692, 693, 699), CVT NationalCenter (644/645), CVT ProviderToHomePatient (179), and SF General (694/695, 696)

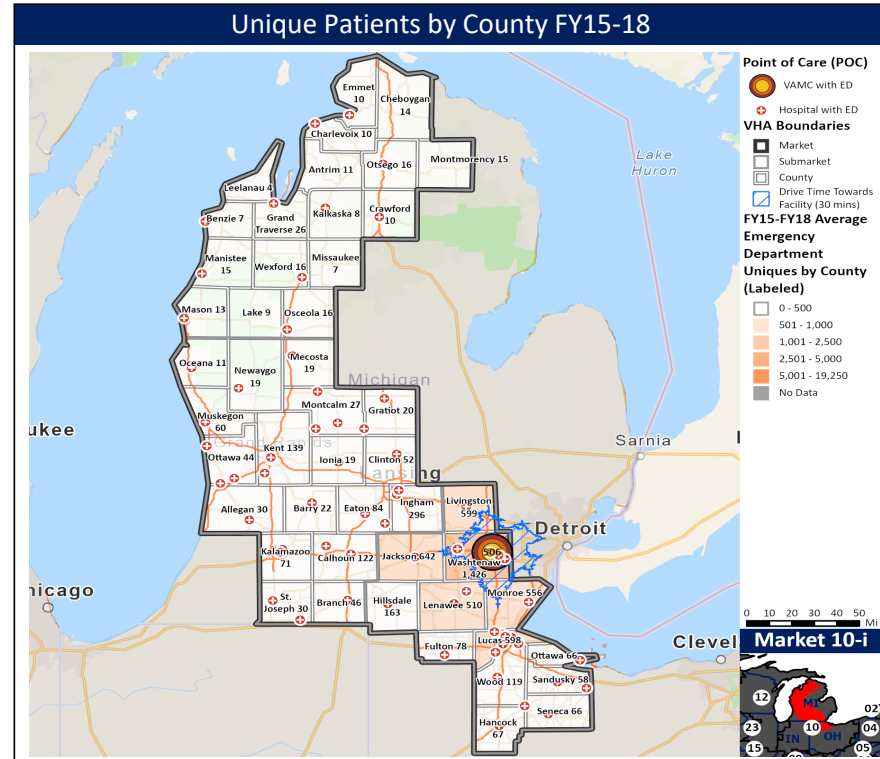
Source: FY15-18 Detailed Telehealth Workload by Patient Site, Provider Site, Stop Codes and Telehealth Type Report

2.29.V10.MichErie.515



VISN 10: MichErie Market

Demand ► Emergency Department Uniques (FY15-18)



Note: Map shows acute and critical access hospitals with Emergency Departments and does not include freestanding Emergency Departments

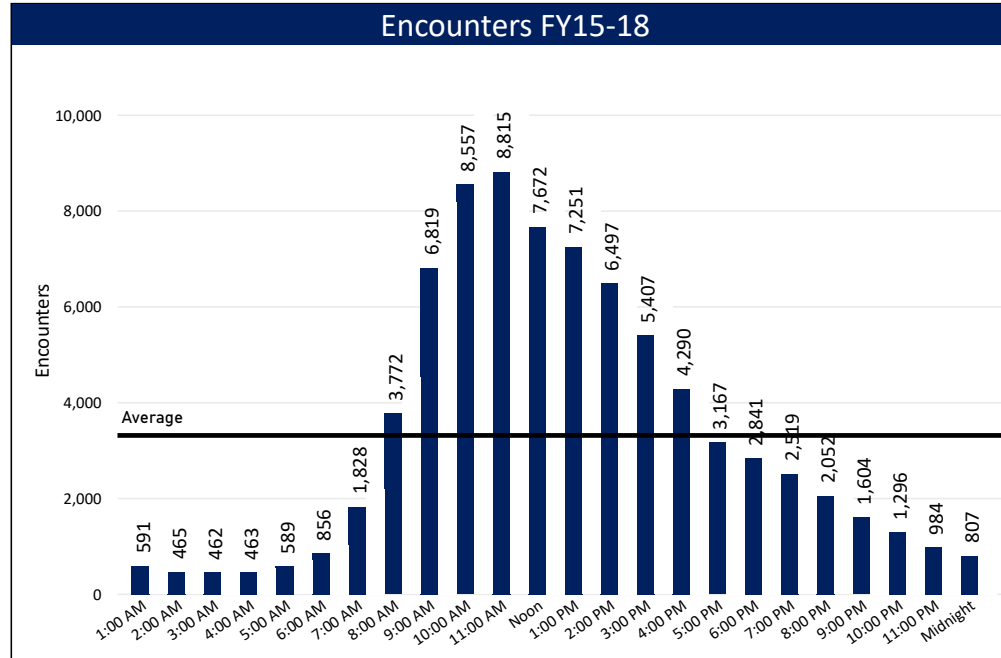
Source: HRSA Data Warehouse

2.28.V10.MichErie#IMG



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Emergency Department Encounters FY15-FY18 — Ann Arbor-Michigan VAMC



91.1% of encounters seen between FY15-FY18 occurred between 8 A.M. and 10 P.M.

83.4% of encounters seen between FY15-18 occurred on weekdays vs. weekends

	CPT Code	FY15	FY16	FY17	FY18
Encounters	99281	5,074	4,597	3,546	2,019
	99282	5,763	6,859	7,022	4,169
	99283	5,135	5,256	5,899	7,801
	99284	1,519	1,464	2,032	3,851
	99285	487	508	552	1,075
Total Encounters	Total	17,978	18,684	19,051	18,915
VA Admissions %	Total	15.2%	15.6%	16.2%	16.6%
% Transfers	Total	0.9%	1.2%	0.7%	0.6%



VISN 10: MichErie Market

Demand ► Emergency Department Operations

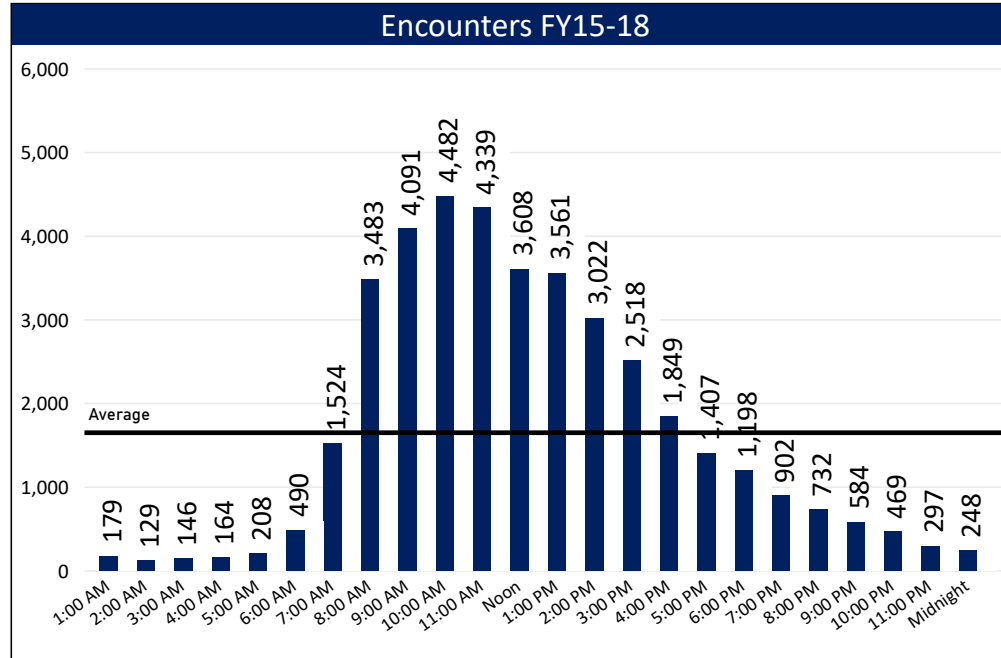
	Measure	FY17	FY18	FY17 National	FY18 National
Ann Arbor-Michigan	ED Door to Inpatient Floor (Min)	327	307	312	316
	ED Admit Delay (Min)	150	138	126	129
	ED % Boarded > 4 Hrs	21.0%	14.4%	15.2%	16.2%
	Diversion Total Hours	N/A	N/A	N/A	262,871
Battle Creek	ED Door to Inpatient Floor (Min)	175	216	312	316
	ED Admit Delay (Min)	75	81	126	129
	ED % Boarded > 4 Hrs	1.4%	2.9%	15.2%	16.2%
	Diversion Total Hours	N/A	N/A	N/A	262,871





VISN 10: MichErie Market — Battle Creek

Demand ► Urgent Care Encounters (FY15-18) – Battle Creek VAMC



91.5% of encounters seen between FY15-18 occurred between 8 A.M. and 10 P.M

86.1% of encounters seen between FY15-18 occurred on weekdays vs. weekends

Encounters				
CPT Code	FY15	FY16	FY17	FY18
99201	593	1,233	289	464
99202	271	288	116	118
99203	59	97	46	33
99204	4	12	2	1
99211	5,689	5,631	3,296	1,740
99212	3,575	3,445	4,169	4,185
99213	1,655	1,534	2,012	2,109
99214	211	347	413	545
99215	4	4	9	7
Total	12,061	12,591	10,352	9,202

CPT codes filtered by Stop Code 131 Urgent Care Clinic



VISN 10: MichErie Market

Demand ► Non-VA Community Care (NVCC) FY16-18 – Outpatient CPT Authorizations

Sector/County Name			Primary Care			Mental Health			Medicine			Surgery			Rehab Medicine		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-i-1-A	Cheboygan, MI	1,070	2	2	4	1	2	2	39	81	280	69	79	251	59	61	116
10-i-1-A	Crawford, MI	589	1	N/A	N/A	N/A	N/A	N/A	29	34	116	25	23	74	19	19	50
10-i-1-A	Emmet, MI	938	1	3	4	3	3	2	27	54	184	39	58	149	29	56	87
10-i-1-A	Montmorency, MI	618	3	1	2	1	N/A	N/A	12	33	100	24	18	80	15	13	14
10-i-1-A	Otsego, MI	994	1	1	N/A	1	1	N/A	28	33	137	18	35	105	19	26	69
	Sector Subtotal	4,209	8	7	10	6	6	4	135	235	817	175	213	659	141	175	336
10-i-1-B	Antrim, MI	734	N/A	N/A	N/A	1	2	3	27	28	100	27	37	101	18	17	26
10-i-1-B	Benzie, MI	595	N/A	N/A	N/A	N/A	3	3	22	31	105	20	26	83	10	13	14
10-i-1-B	Charlevoix, MI	860	5	3	5	N/A	2	6	17	31	125	30	34	84	19	17	46
10-i-1-B	Grand Traverse, MI	2,648	1	1	N/A	N/A	1	N/A	72	117	336	90	88	291	30	41	51
10-i-1-B	Kalkaska, MI	638	1	N/A	N/A	N/A	N/A	N/A	36	41	131	29	42	116	8	12	14
10-i-1-B	Leelanau, MI	476	1	N/A	N/A	N/A	N/A	N/A	14	32	80	14	19	52	10	8	5
	Sector Subtotal	5,951	8	4	5	1	8	12	188	280	877	210	246	727	95	108	156
10-i-1-C	Lake, MI	459	6	4	17	N/A	N/A	1	37	32	102	31	25	88	16	10	16
10-i-1-C	Manistee, MI	893	5	7	14	1	N/A	3	47	58	257	80	73	221	15	29	55
10-i-1-C	Mason, MI	855	11	11	45	7	3	11	61	62	194	68	64	141	18	12	22
10-i-1-C	Missaukee, MI	440	N/A	1	1	1	N/A	N/A	21	25	78	26	27	70	18	15	36
10-i-1-C	Osceola, MI	889	6	4	2	3	1	1	22	29	79	33	35	106	11	16	21
10-i-1-C	Wexford, MI	1,244	3	5	4	2	1	N/A	53	81	213	53	60	180	38	32	63
	Sector Subtotal	4,780	31	32	83	14	5	16	241	287	923	291	284	806	116	114	213
10-i-2-A	Muskegon, MI	4,695	2	1	3	3	N/A	1	107	119	317	123	165	390	48	78	161
10-i-2-A	Oceana, MI	855	3	3	14	N/A	N/A	N/A	36	30	78	38	35	80	39	25	43
	Sector Subtotal	5,550	5	4	17	3	N/A	1	143	149	395	161	200	470	87	103	204
10-i-2-B	Ionia, MI	1,219	1	2	10	N/A	N/A	2	30	29	112	35	39	80	7	12	28
10-i-2-B	Mecosta, MI	987	8	4	17	N/A	N/A	3	28	32	102	31	37	99	22	26	29
10-i-2-B	Montcalm, MI	1,649	15	9	35	N/A	1	N/A	42	51	138	42	44	156	17	24	62



VISN 10: MichErie Market

Demand ► Non-VA Community Care (NVCC) FY16-18 – Outpatient CPT Authorizations, cont.

Sector/County Name			Primary Care			Mental Health			Medicine			Surgery			Rehab Medicine		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-i-2-B	Newaygo, MI	1,387	10	12	38	2	2	4	61	57	173	66	86	196	31	41	64
	Sector Subtotal	5,242	34	27	100	2	3	9	161	169	525	174	206	531	77	103	183
10-i-2-C	Allegan, MI	2,199	6	N/A	1	8	N/A	N/A	53	67	175	65	60	150	12	11	18
10-i-2-C	Ottawa, MI	4,591	N/A	N/A	4	N/A	N/A	1	70	77	335	102	101	280	28	24	48
	Sector Subtotal	6,790	6	N/A	5	8	N/A	1	123	144	510	167	161	430	40	35	66
10-i-2-D	Kent, MI	11,957	8	4	2	3	5	3	251	264	751	268	301	845	43	27	57
	Sector Subtotal	11,957	8	4	2	3	5	3	251	264	751	268	301	845	43	27	57
10-i-2-E	Clinton, MI	1,485	N/A	N/A	N/A	2	N/A	N/A	30	24	93	20	12	45	38	34	50
10-i-2-E	Eaton, MI	2,555	N/A	N/A	1	8	N/A	N/A	55	46	155	38	33	78	40	51	73
10-i-2-E	Gratiot, MI	1,124	N/A	1	8	2	1	2	17	30	70	25	36	91	19	35	33
10-i-2-E	Ingham, MI	4,556	2	N/A	2	9	2	4	69	105	290	83	51	144	105	119	175
	Sector Subtotal	9,720	2	1	11	21	3	6	171	205	608	166	132	358	202	239	331
10-i-2-F	Barry, MI	1,344	N/A	N/A	1	N/A	N/A	N/A	35	39	121	46	31	114	3	3	19
10-i-2-F	Branch, MI	1,206	2	5	14	N/A	N/A	2	49	43	139	54	26	86	31	21	58
10-i-2-F	Calhoun, MI	4,627	3	N/A	2	16	1	3	136	129	401	128	115	310	31	12	35
10-i-2-F	Kalamazoo, MI	4,769	N/A	1	3	21	1	N/A	108	95	338	121	107	297	14	21	59
10-i-2-F	Saint Joseph, MI	1,415	N/A	N/A	3	8	N/A	N/A	45	46	112	27	29	104	24	14	42
	Sector Subtotal	13,361	5	6	23	45	2	5	373	352	1,111	376	308	911	103	71	213
10-i-3-A	Hillsdale, MI	1,331	5	3	8	N/A	N/A	N/A	91	92	167	29	14	34	80	64	70
10-i-3-A	Jackson, MI	4,441	1	1	1	4	N/A	1	153	175	371	59	30	65	177	102	133
	Sector Subtotal	5,772	6	4	9	4	N/A	1	244	267	538	88	44	99	257	166	203
10-i-3-B	Lenawee, MI	2,949	1	N/A	3	N/A	1	2	117	107	255	43	44	61	84	53	74
10-i-3-B	Livingston, MI	3,249	N/A	N/A	N/A	2	1	6	146	118	280	58	36	62	18	20	36
10-i-3-B	Washtenaw, MI	5,473	1	N/A	2	1	3	4	196	181	392	97	53	119	21	15	36
	Sector Subtotal	11,671	2	N/A	5	3	5	12	459	406	927	198	133	242	123	88	146
10-i-3-C	Fulton, OH	1,173	2	N/A	3	N/A	N/A	N/A	41	32	63	29	10	23	24	10	13



VISN 10: MichErie Market

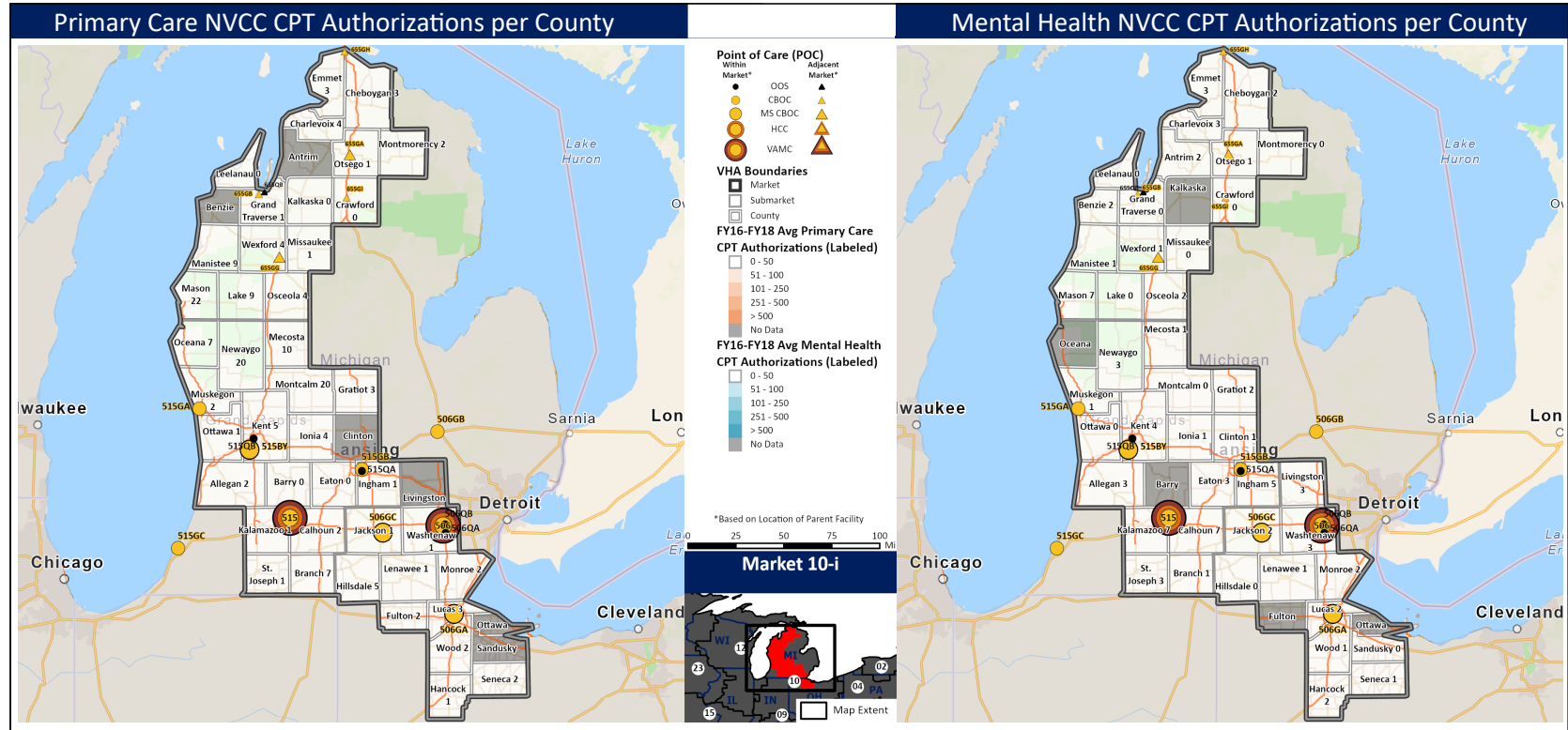
Demand ▶ Non-VA Community Care (NVCC) FY16-18 – Outpatient CPT Authorizations, cont.

Sector/County Name			Primary Care			Mental Health			Medicine			Surgery			Rehab Medicine		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-i-3-C	Lucas, OH	9,251	3	3	2	3	1	1	250	231	495	133	69	140	19	13	30
10-i-3-C	Monroe, MI	3,696	2	1	2	2	2	1	119	92	219	49	35	53	21	12	33
10-i-3-C	Ottawa, OH	1,543	N/A	N/A	N/A	N/A	N/A	N/A	61	50	90	52	45	52	54	40	46
10-i-3-C	Wood, OH	2,493	3	1	2	1	N/A	1	67	52	125	31	20	52	12	6	10
	Sector Subtotal	18,156	10	5	9	6	3	3	538	457	992	294	179	320	130	81	132
10-i-3-E	Hancock, OH	1,568	N/A	1	2	2	1	4	53	58	126	23	20	46	49	46	66
10-i-3-E	Sandusky, OH	1,568	N/A	N/A	N/A	N/A	N/A	1	60	50	70	48	34	47	24	28	32
10-i-3-E	Seneca, OH	1,878	3	1	3	N/A	1	2	53	59	94	28	18	41	50	32	56
	Sector Subtotal	5,014	3	2	5	2	2	7	166	167	290	99	72	134	123	106	154
	Market Total	108,173	128	96	284	118	42	80	3,193	3,382	9,264	2,667	2,479	6,532	1,537	1,416	2,394



VISN 10: MichErie Market

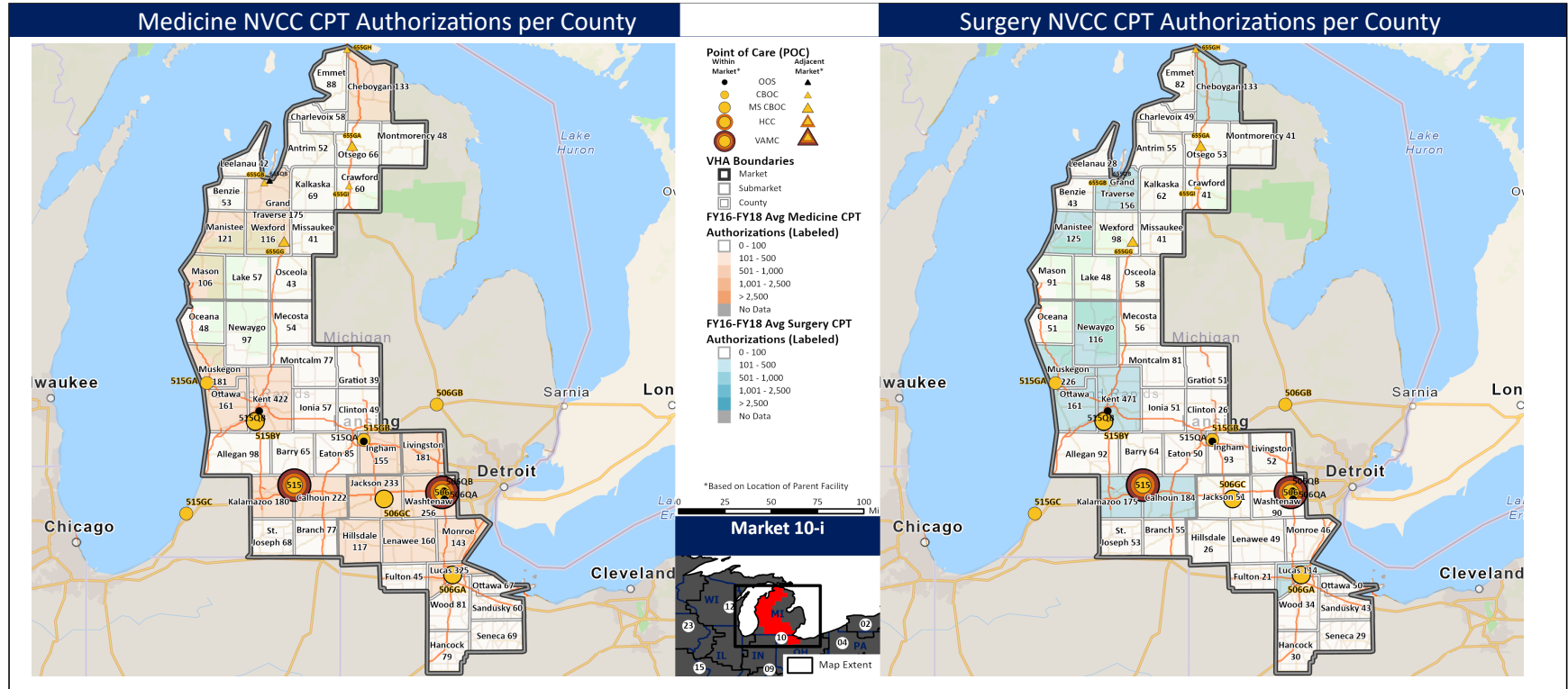
Demand ► NVCC Outpatient CPT Authorizations (Primary Care and Mental Health)





VISN 10: MichErie Market

Demand ► NVCC Outpatient CPT Authorizations (Medicine and Surgery)

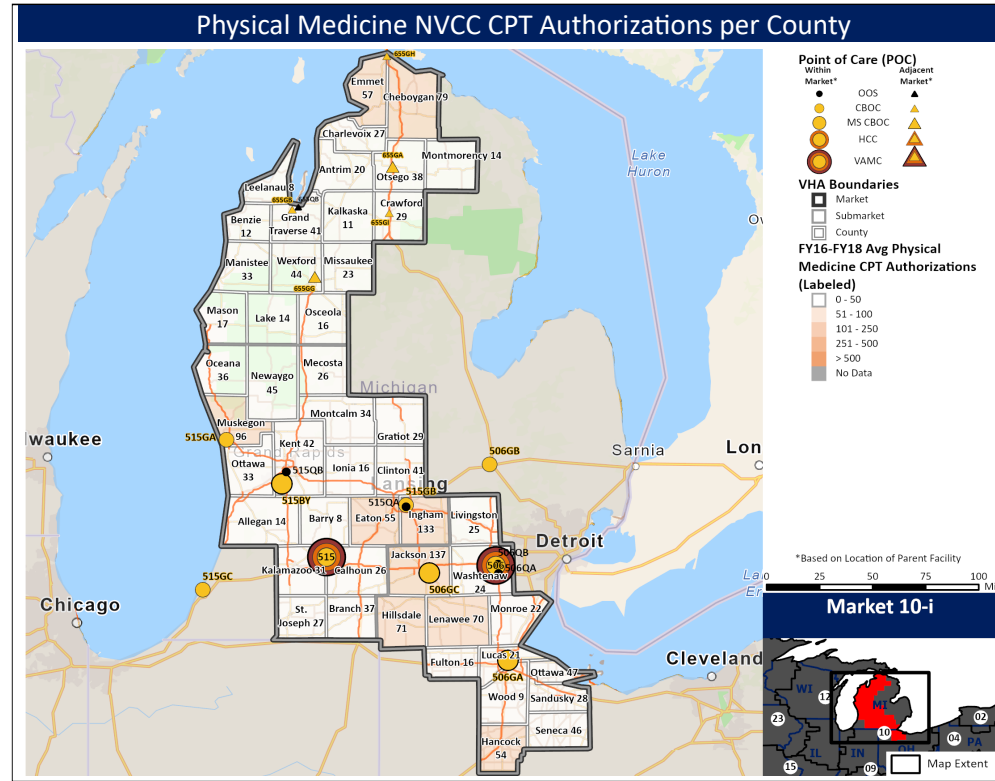


Source: VHA Office of Community Care

2.33.V10.MichErie

VISN 10: MichErie Market

Demand ► NVCC Outpatient CPT Authorizations (Physical Medicine)



Source: VHA Office of Community Care

2.34.V10.MichErie



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Top Services Provided by NVCC for Ann Arbor-Michigan

Commercial*			
	FY16	FY17	FY18
Category of Care	Total Authorizations	Total Authorizations	Total Authorizations
NIC HOMEMAKER/HOME HEALTH AID	1,382	2,227	2,354
SLEEP STUDY/POLYSOMNOGRAPHY	259	433	934
CHIROPRACTIC	288	57	804
RADIOLOGY MAMMOGRAM	463	56	544
ACUPUNCTURE	116	36	503
Inpatient	609	419	446
NIC RESPITE CARE	193	366	350
ER VISIT/URGENT CARE	593	328	233
DERMATOLOGY TESTS, PROCEDURES, STUDIES	16	90	222
NIC SKILLED HOME CARE	74	139	182
NIC SKILLED NURSING	99	122	151
OPHTHALMOLOGY TESTS, PROCEDURES, STUDIES	179	47	115
PHYSICAL THERAPY	436	37	88
NEUROSURGERY	14	36	84
DIALYSIS	18	34	84
NIC HOSPICE/PALLIATIVE CARE	77	85	67
PAIN MANAGEMENT	498	60	62
ORTHOPEDIC TESTS, PROCEDURES, STUDIES	35	28	57
OBSTETRICS	36	33	52
GASTROENTEROLOGY TESTS, PROCEDURES, STUDIES	39	14	47
NIC ADULT DAY CARE	13	25	47
UROLOGY TESTS, PROCEDURES, STUDIES	34	19	41
SURGERY GENERAL	80	31	33
GYNECOLOGY TESTS, PROCEDURES, STUDIES	8	6	31
GENETIC TESTING/COUNSELING	N/A	8	30
Other	2,006	514	390
Total	7,565	5,250	7,951

*Commercial includes authorizations from federally qualified health centers and provider agreements

Source: VHA Office of Community Care

2.26.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Demand ► Top Services Provided by NVCC for Battle Creek

Commercial*			
	FY16	FY17	FY18
Category of Care	Total Authorizations	Total Authorizations	Total Authorizations
ER VISIT/URGENT CARE	1,786	1,553	1,985
OPHTHALMOLOGY	36	170	1,415
Inpatient	1,139	1,203	1,391
NIC HOMEMAKER/HOME HEALTH AID	787	1,047	1,151
PHYSICAL THERAPY	176	119	737
RADIOLOGY MAMMOGRAM	153	106	645
ACUPUNCTURE	4	N/A	626
SLEEP STUDY/POLYSOMNOGRAPHY	103	68	568
RADIOLOGY MRI/MRA	42	34	426
COLONOSCOPY	98	54	396
RADIOLOGY ULTRASOUND	226	231	377
PAIN MANAGEMENT	112	30	286
NIC RESPITE CARE	228	245	247
GASTROENTEROLOGY	22	22	233
ORTHOPEDIC TESTS, PROCEDURES, STUDIES	47	46	215
NIC ADULT DAY CARE	173	224	204
DERMATOLOGY	3	20	197
PODIATRY	35	20	174
UROLOGY	26	25	172
SURGERY GENERAL	35	27	152
RADIOLOGY CT SCAN	149	170	143
NIC SKILLED HOME CARE	69	112	126
NEPHROLOGY	68	100	114
NEUROSURGERY	N/A	16	93
CARDIOLOGY REHAB	44	15	90
Other	1,124	593	1,121
Total	6,642	6,238	13,284

*Commercial includes authorizations from federally qualified health centers and provider agreements

Source: VHA Office of Community Care

2.26.V10.MichErie.515



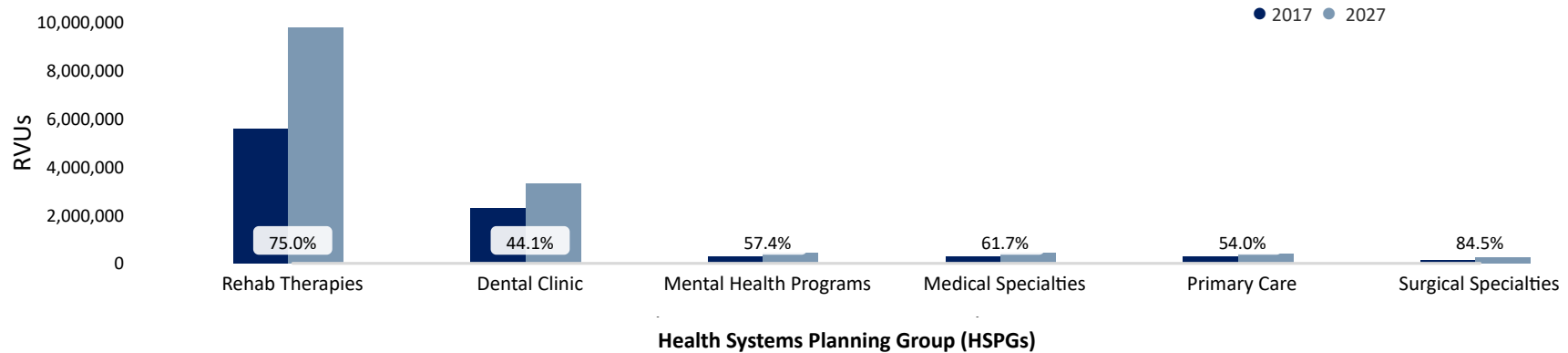
Demand ▶ Estimated Future Market Demand — Outpatient



VISN 10: MichErie Market

Demand ► **BY17 Market Utilization Projections (Outpatient) — MichErie Market****BY17 VISN 10: MichErie Market Utilization Projections (RVUs)**

	FY17			FY22	FY27	10 Year Change in Total	10 Year % Change in Total
	In-House	Community	Total	Total	Total		
Rehab Therapies	4,570,725	1,016,908	5,587,632	7,859,577	9,777,096	4,189,464	+75%
Dental Clinic	1,626,910	663,522	2,290,432	3,016,250	3,300,136	1,009,704	+44.1%
Mental Health Programs	282,081	2,410	284,491	376,999	447,831	163,339	+57.4%
Medical Specialties	214,856	53,924	268,780	369,566	434,540	165,759	+61.7%
Primary Care	251,639	14,823	266,463	349,437	410,320	143,857	+54%
Surgical Specialties	97,658	41,151	138,809	208,294	256,086	117,277	+84.5%

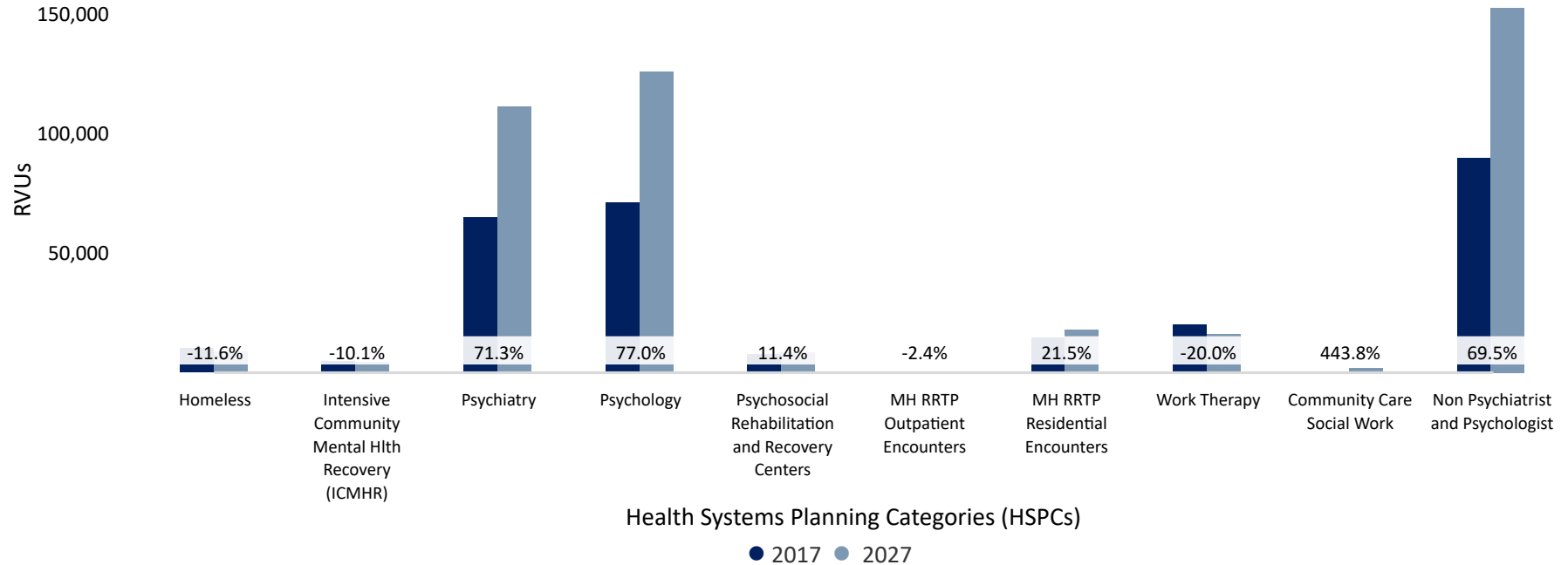




VISN 10: MichErie Market

Demand ► **Outpatient Utilization Projections by Health Systems Planning Category (HSPC)
Mental Health RVUs — MichErie Market**

Ambulatory Mental Health, Health Systems Planning Categories (HSPCs)

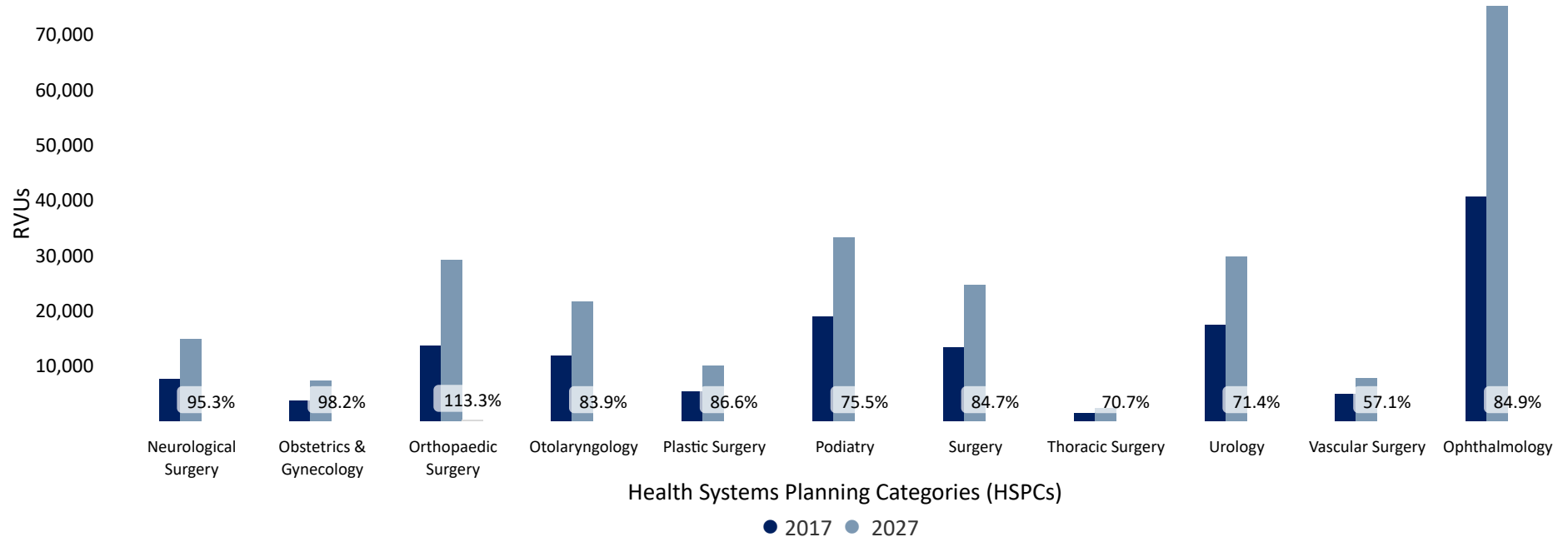




VISN 10: MichErie Market

Demand ► **Outpatient Utilization Projections by Health Systems Planning Category (HSPC)
Surgical Specialties RVUs — MichErie Market**

Ambulatory Surgical Specialties, Health Systems Planning Categories (HSPCs)

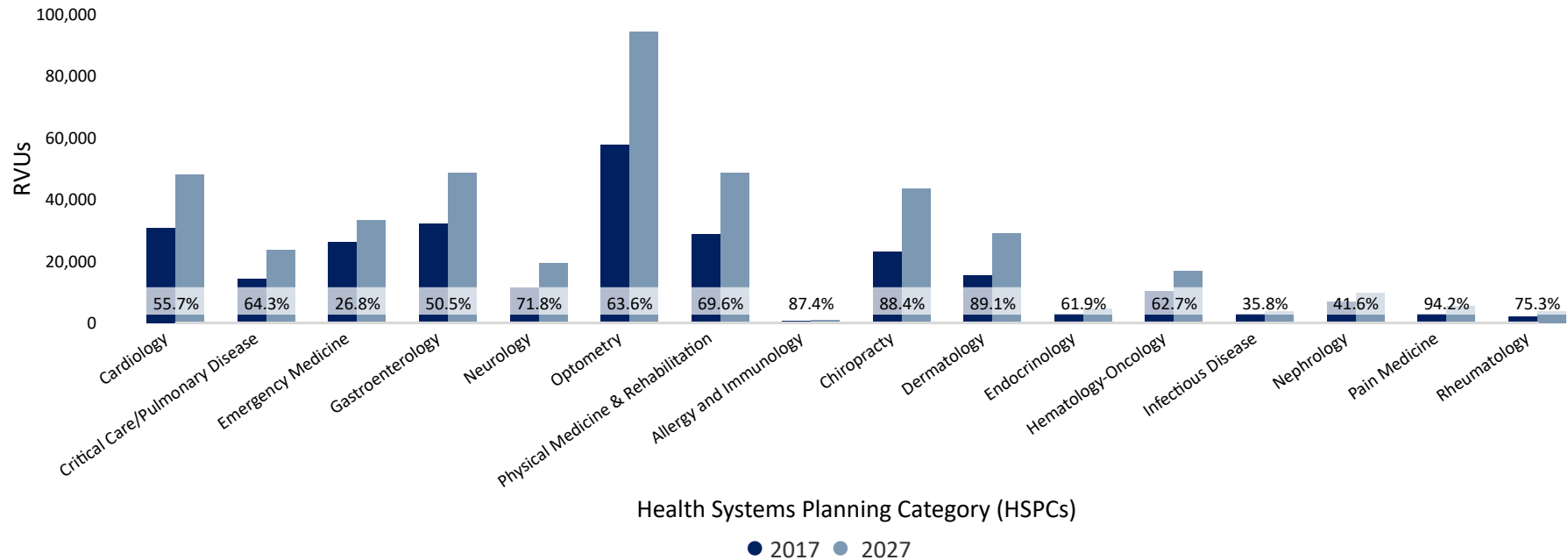




VISN 10: MichErie Market

Demand ► Outpatient Utilization Projections by Health Systems Planning Category (HSPC) Medical Specialties RVUs — MichErie Market

Ambulatory Medical Specialties, Health Systems Planning Categories (HSPCs)



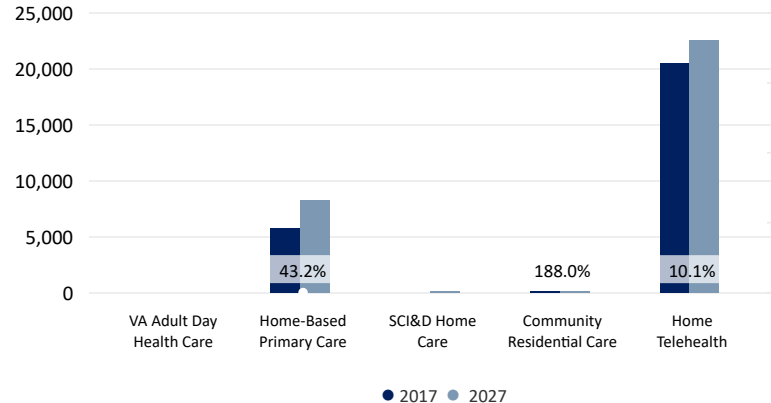


VISN 10: MichErie Market

Demand ► Outpatient Utilization Projections by Health Systems Planning Category (HSPC) Ambulatory Long Term Support Services — MichErie Market

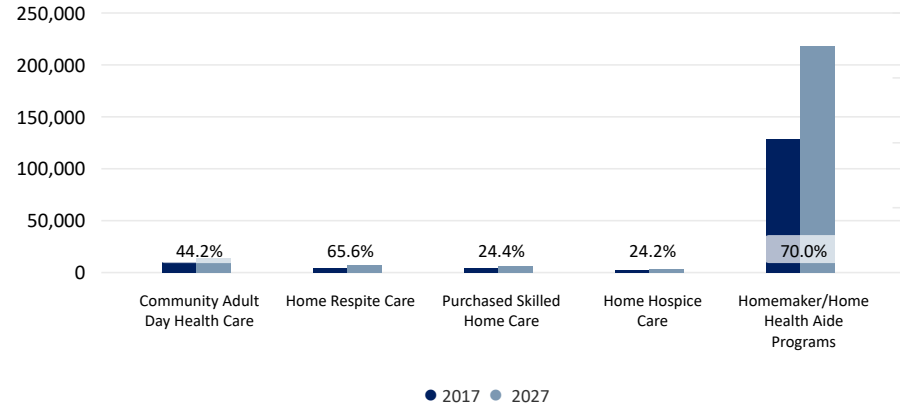
BY17 MichErie Market In-House LTSS Utilization Projections (RVUs)

	FY17	FY22	FY27	10 Year Change	10 Year % Change
VA Adult Day Health Care	0	0	0	0	
Home-Based Primary Care	5,747	7,071	8,229	2,482	43.2%
SCI&D Home Care	0	3	3	3	
Community Residential Care	25	79	72	47	188.0%
Home Telehealth	20,487	22,303	22,546	2,059	10.1%



BY17 MichErie Market Community LTSS Utilization Projections (Procedures)

	FY17	FY22	FY27	10 Year Change	10 Year % Change
Community Adult Day Health Care	10,001	12,615	14,425	4,424	44.2%
Home Respite Care	4,548	6,105	7,533	2,985	65.6%
Purchased Skilled Home Care	4,738	5,524	5,892	1,154	24.4%
Home Hospice Care	2,741	3,336	3,403	662	24.2%
Homemaker/Home Health Aide Programs	128,508	186,038	218,408	89,900	70.0%



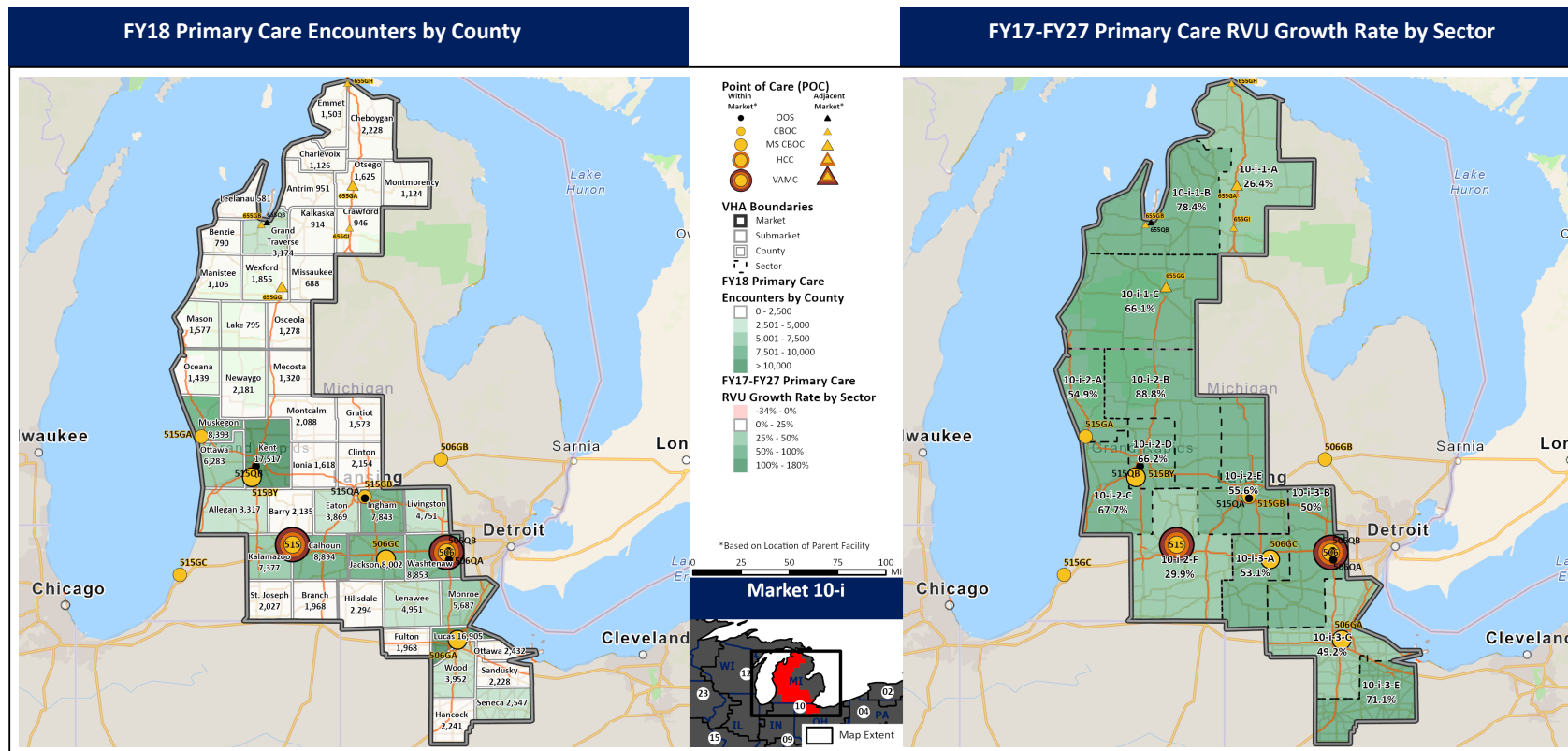
Source: BY17 EHCPM Utilization Projections

3.5.V10.MichErie



VISN 10: MichErie Market

Demand ► Primary Care Workload – Historic & Projected



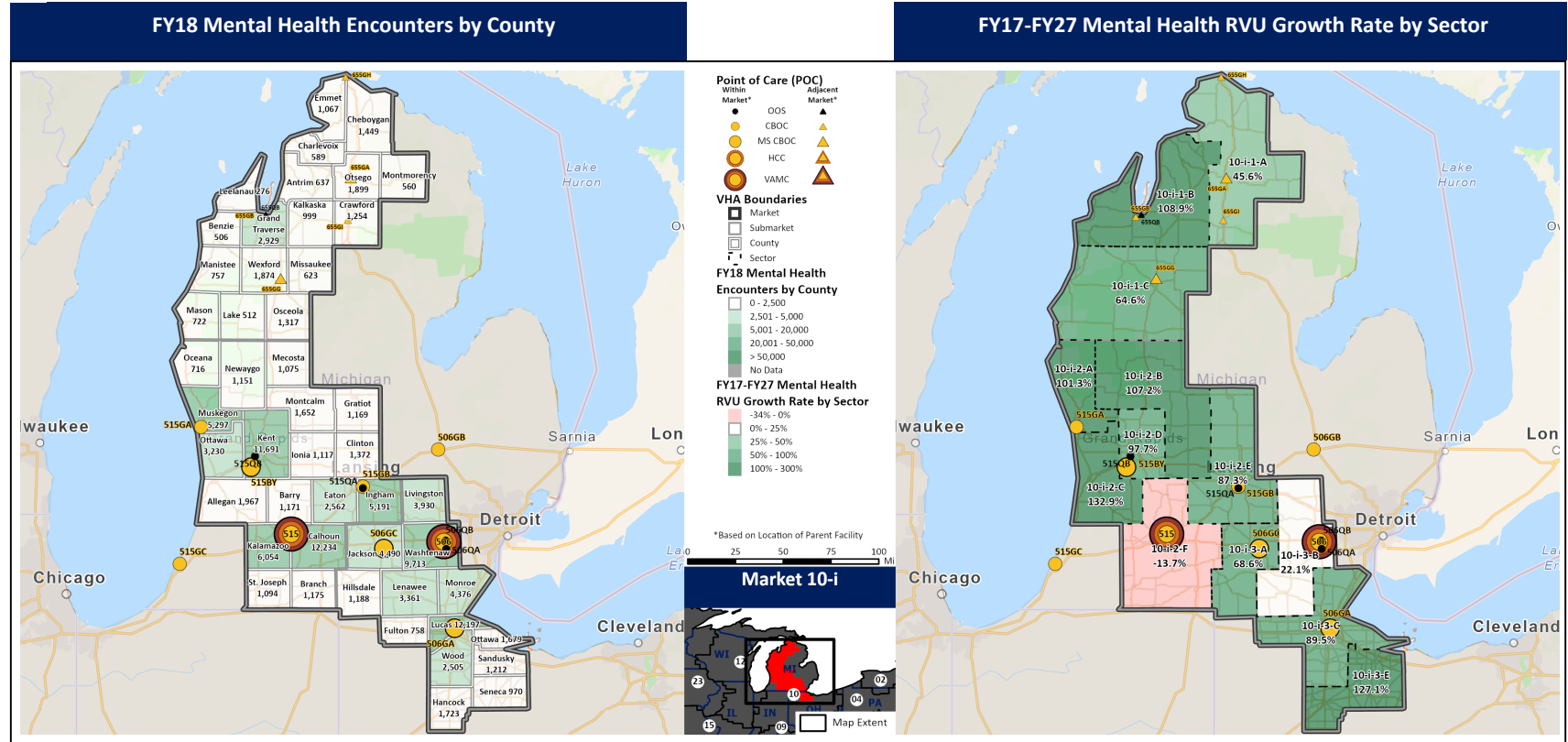
Source: 1. VSSC Encounters Cube 2. BY17 EHCPM Utilization Projections

3.6.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Mental Health Workload – Historic & Projected



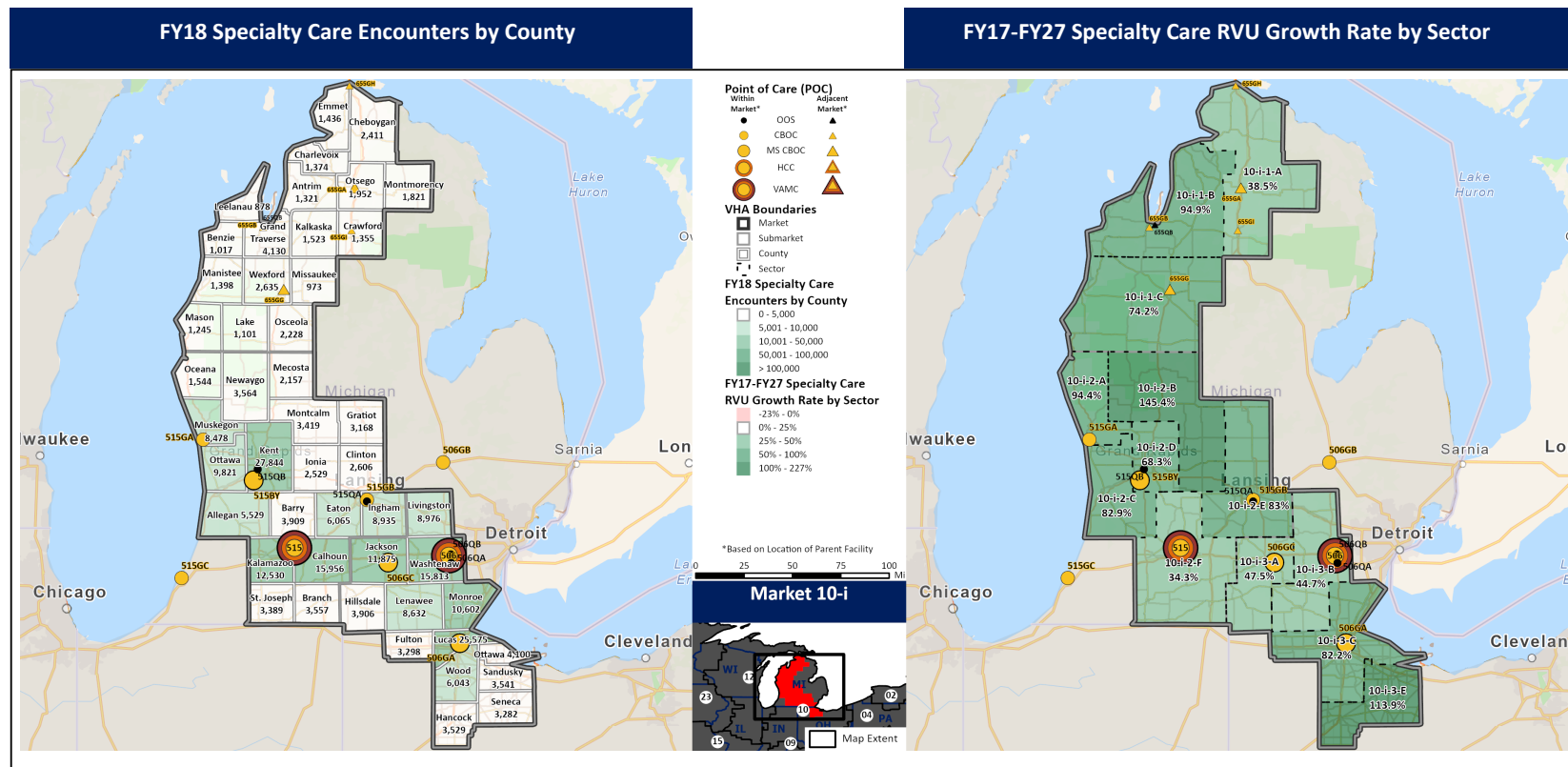
Source: 1. VSSC Encounters Cube 2. BY17 EHCPM Utilization Projections

3.7.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Specialty Care Workload (Med/Surg Specialties Combined) – Historic & Projected



Source: 1. VSSC Encounters Cube 2. BY17 EHCPM Utilization Projections

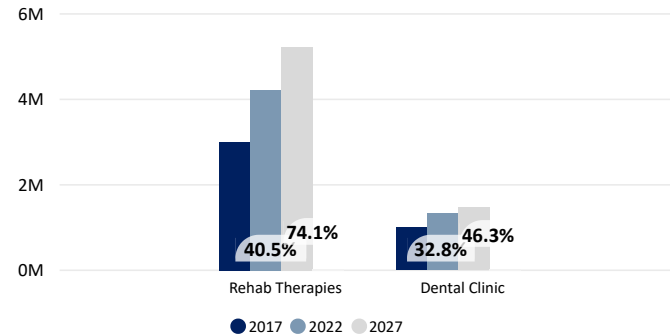
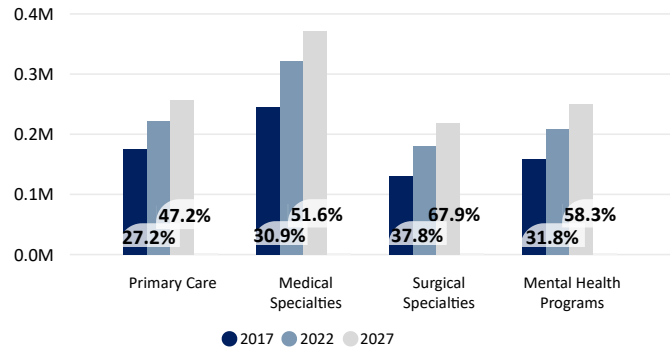
3.8.V10.MichErie#IMG



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► **BY17 Parent Facility Utilization Projections (Outpatient) – Ann Arbor-Michigan VAMC**

BY17 Ann Arbor-Michigan VAMC Utilization Projections (RVUs)							
	FY17			FY22	FY27	10 Year Change in Total	10 Year % Change in Total
	In-House	Community	Total	Total	Total		
Primary Care	169,764	5,171	174,935	222,499	257,543	82,608	47.2%
Medical Specialties	219,469	25,671	245,140	321,003	371,705	126,565	51.6%
Surgical Specialties	121,036	9,398	130,434	179,756	219,029	88,595	67.9%
Mental Health Programs	157,738	724	158,462	208,780	250,872	92,410	58.3%
Rehab Therapies	2,387,424	616,874	3,004,298	4,219,626	5,230,495	2,226,197	74.1%
Dental Clinic	956,712	46,328	1,003,040	1,331,839	1,466,986	463,946	46.3%

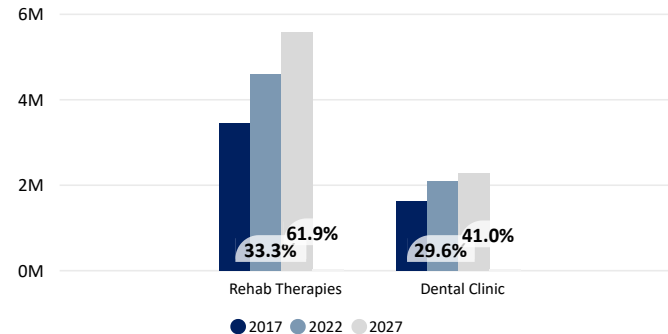
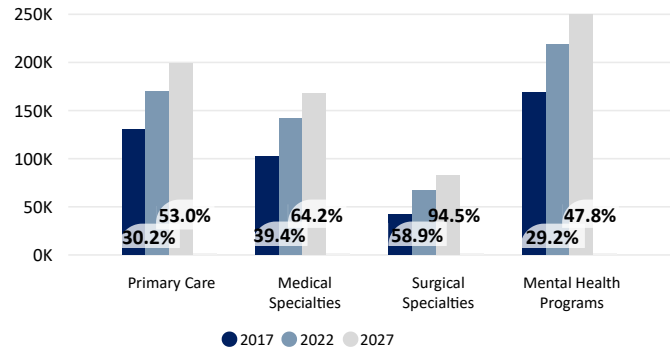




VISN 10: MichErie Market — Battle Creek

Demand ► BY17 Parent Facility Utilization Projections (Outpatient) – Battle Creek VAMC

BY17 Battle Creek VAMC Utilization Projections (RVUs)							
	FY17			FY22	FY27	10 Year Change in Total	10 Year % Change in Total
	In-House	Community	Total				
Primary Care	123,122	7,015	130,137	169,380	199,066	68,929	53.0%
Medical Specialties	74,078	27,893	101,971	142,100	167,452	65,481	64.2%
Surgical Specialties	18,861	23,527	42,388	67,345	82,443	40,055	94.5%
Mental Health Programs	167,967	997	168,964	218,291	249,678	80,714	47.8%
Rehab Therapies	3,055,928	391,943	3,447,871	4,595,281	5,582,635	2,134,764	61.9%
Dental Clinic	959,291	657,509	1,616,800	2,094,895	2,280,158	663,358	41.0%

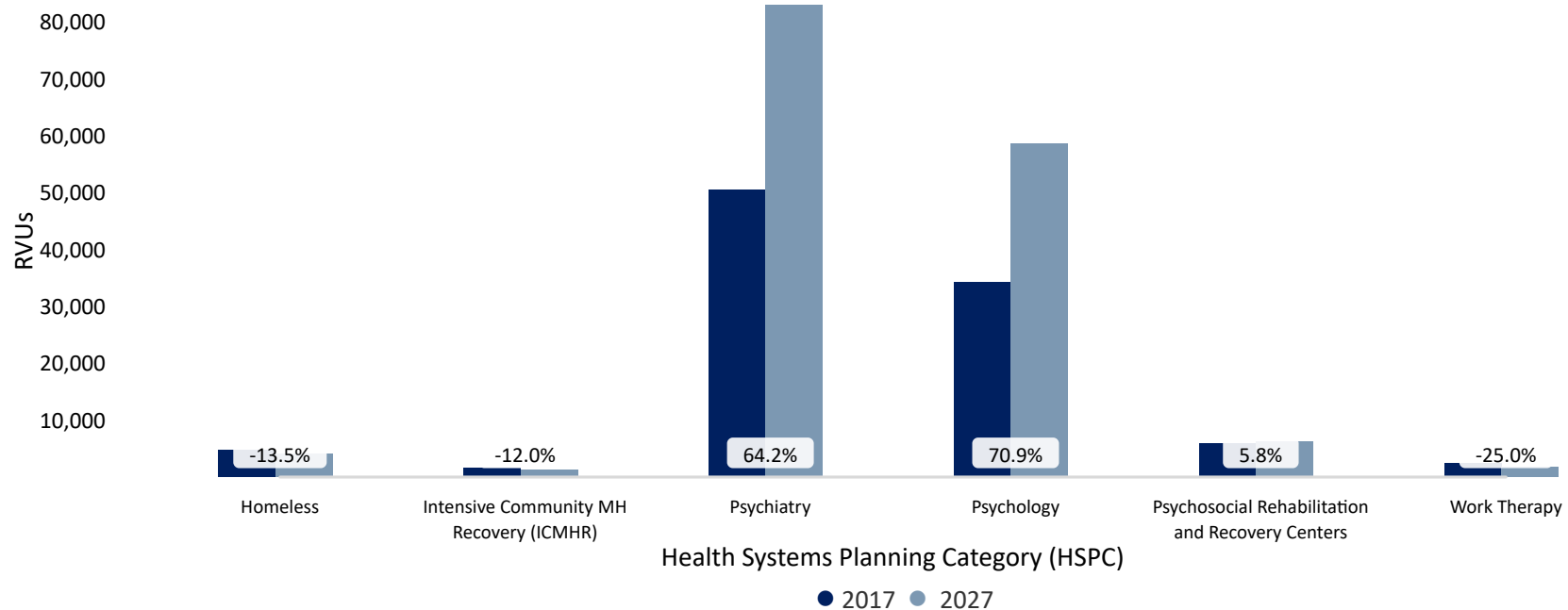




VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)
Mental Health RVUs — Ann Arbor-Michigan VAMC**

Ambulatory Mental Health, Health Systems Planning Categories (HSPCs)

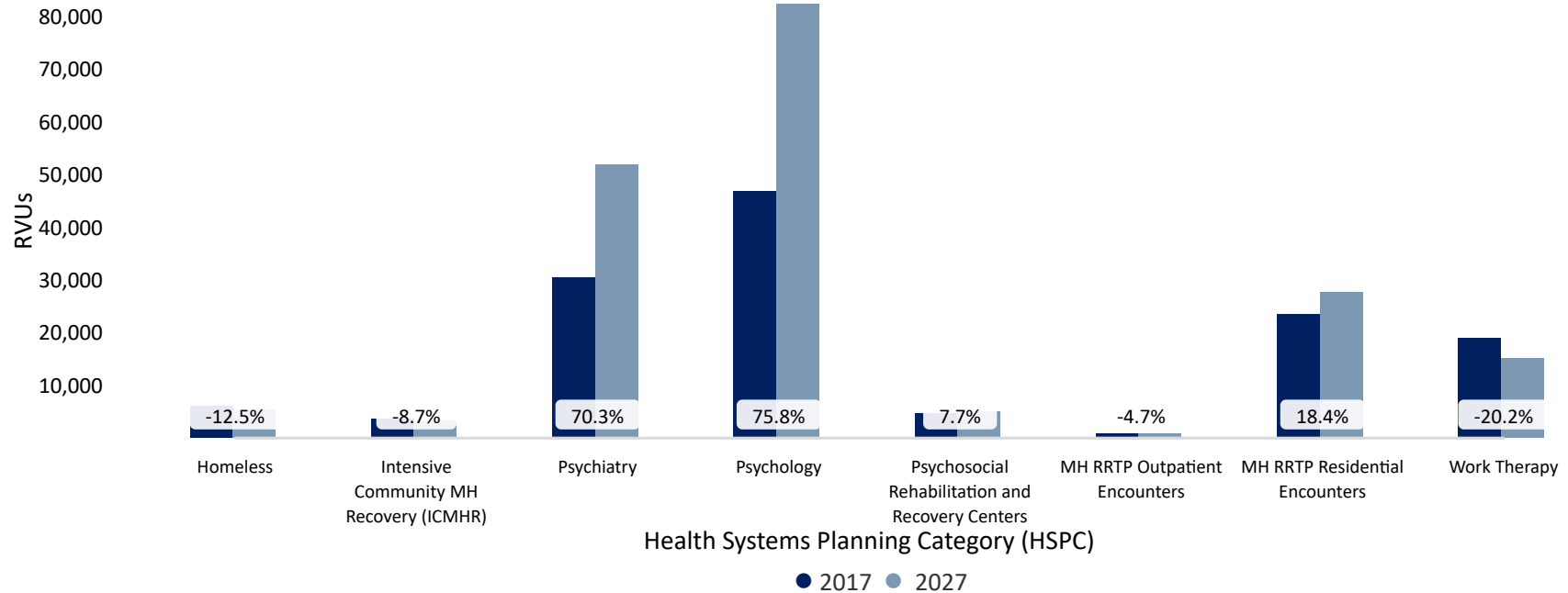




VISN 10: MichErie Market — Battle Creek

Demand ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)**
Mental Health RVUs — Battle Creek VAMC

Ambulatory Mental Health, Health Systems Planning Categories (HSPCs)

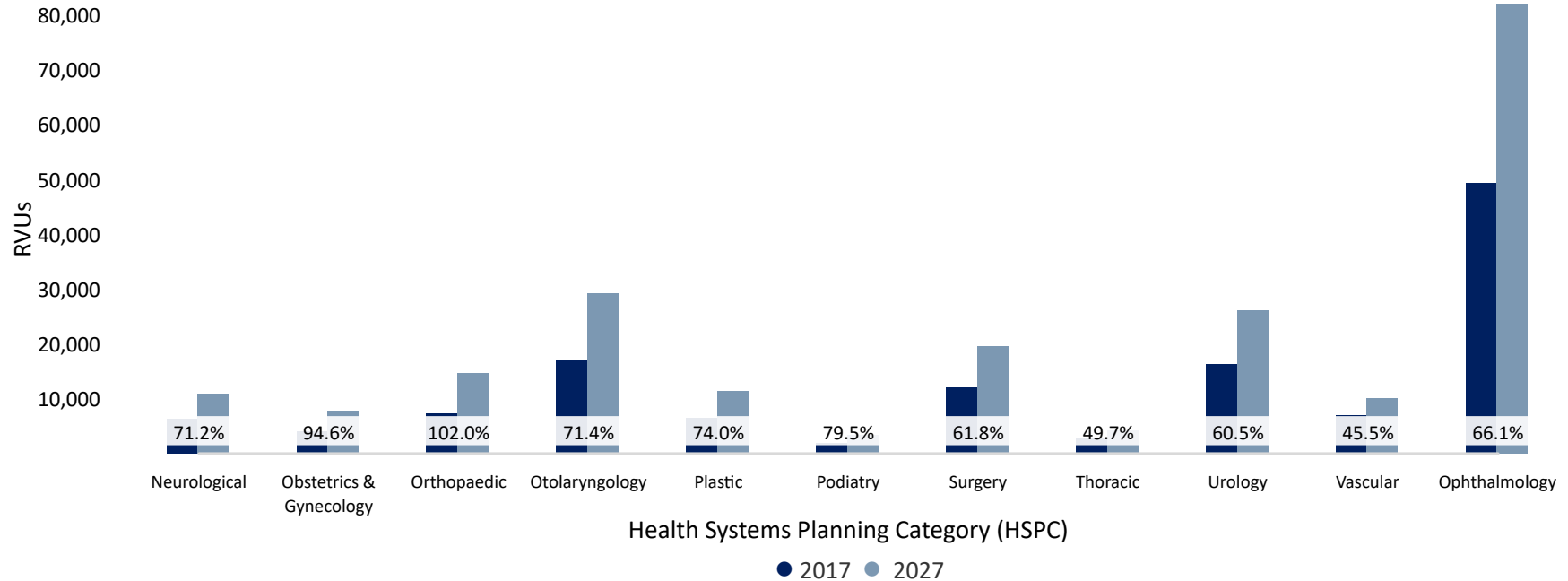




VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)
Surgical Specialties RVUs — Ann Arbor-Michigan VAMC**

Ambulatory Surgical Specialties, Health Systems Planning Categories (HSPCs)

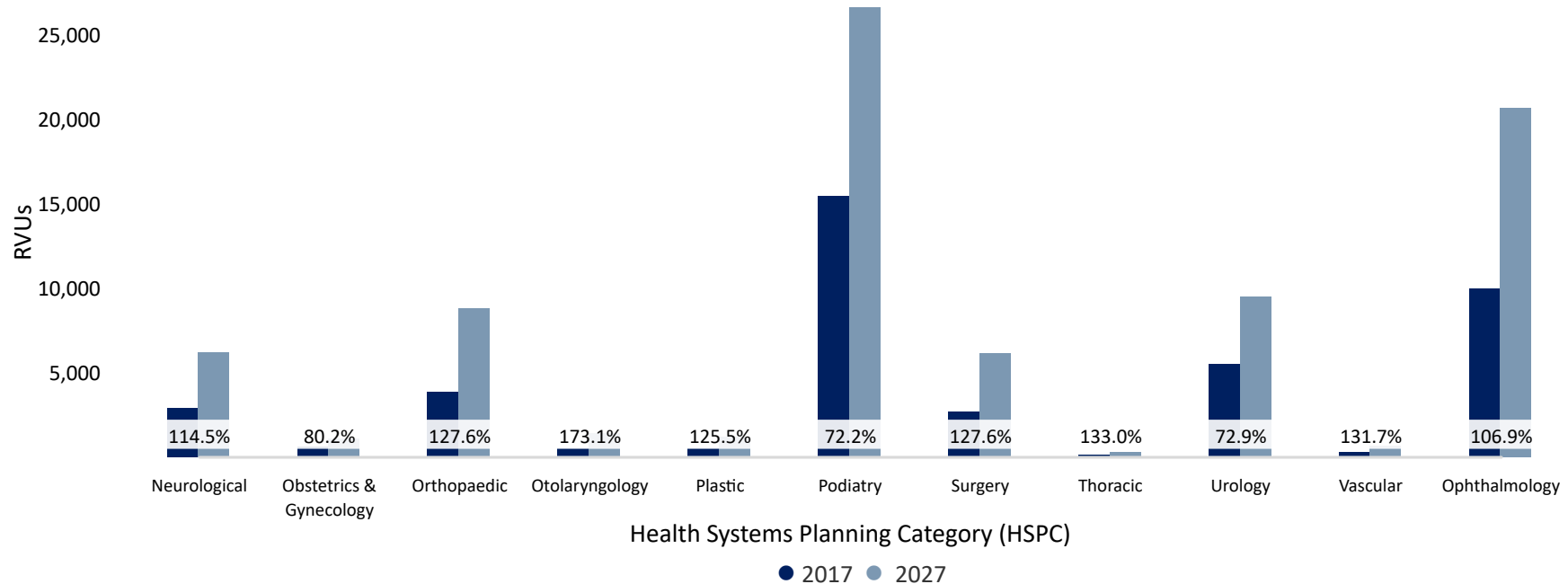




VISN 10: MichErie Market — Battle Creek

Demand ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC)
Surgical Specialties RVUs — Battle Creek VAMC**

Ambulatory Surgical Specialties, Health Systems Planning Categories (HSPCs)

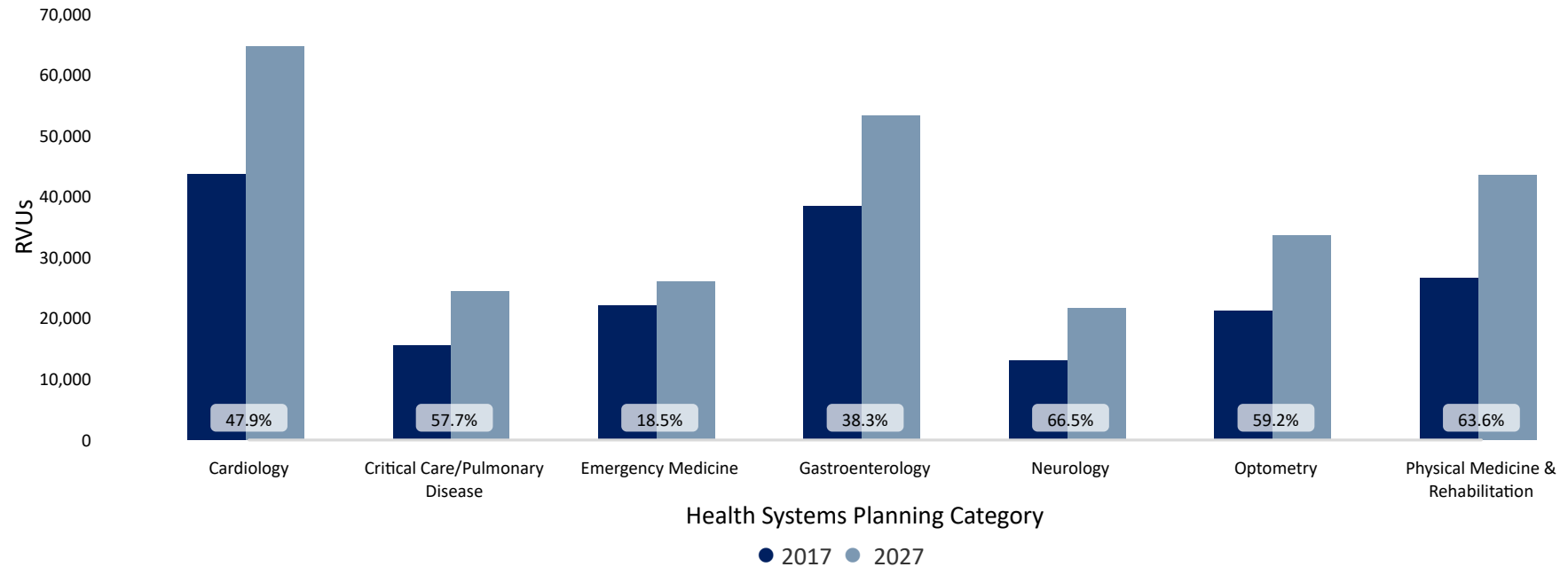




VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Medical Specialties RVUs — Ann Arbor-Michigan VAMC**

Ambulatory Medical Specialties, Health Systems Planning Categories (HSPCs)

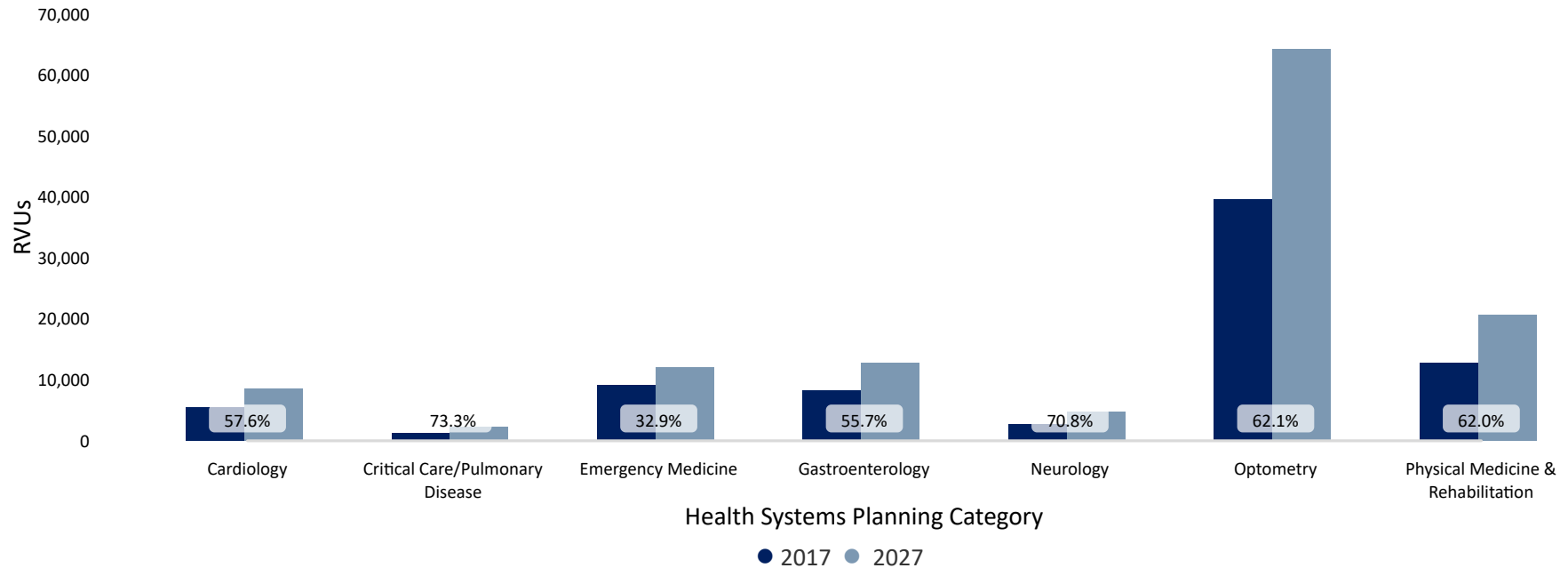




VISN 10: MichErie Market — Battle Creek

Demand ► **Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Medical Specialties RVUs — Battle Creek VAMC**

Ambulatory Medical Specialties, Health Systems Planning Categories (HSPCs)

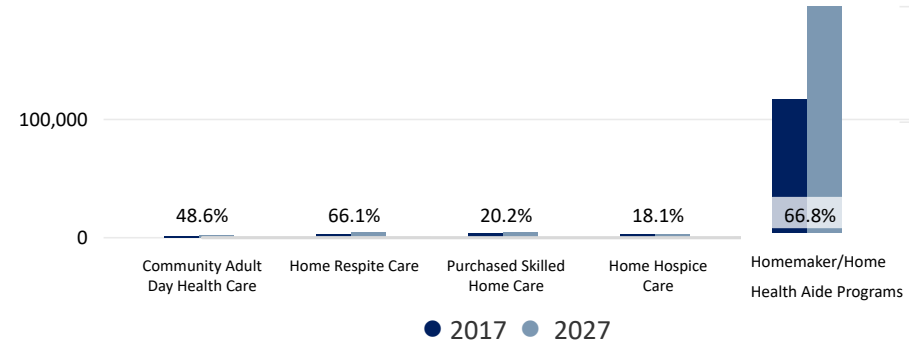
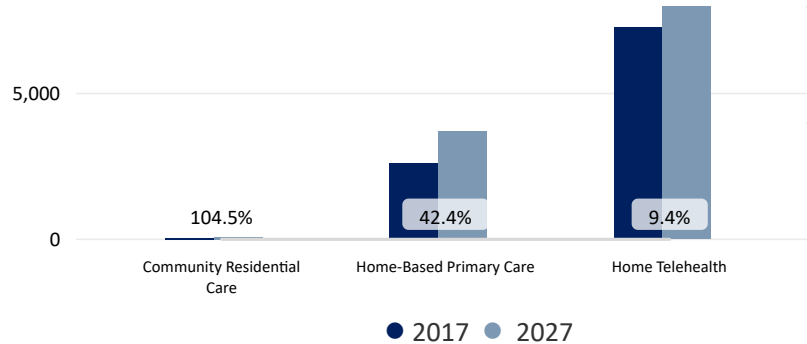




VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Ambulatory Long Term Support Services — Ann Arbor-Michigan VAMC

BY17 Ann Arbor-Michigan VAMC In-House LTSS Utilization Projections (RVUs)						BY17 Ann Arbor-Michigan VAMC Community LTSS Utilization Projections (Procedures)*					
	FY17	FY22	FY27	10 Year Change	10 Year % Change		FY17	FY22	FY27	10 Year Change	10 Year % Change
SCI&D Home Care	N/A	N/A	N/A	N/A	N/A	Community Adult Day Health Care	1,345	1,745	1,999	654	48.6%
VA Adult Day Health Care	N/A	N/A	N/A	N/A	N/A	Home Respite Care	2,637	3,564	4,380	1,743	66.1%
Community Residential Care	43	97	87	45	104.5%	Purchased Skilled Home Care	3,667	4,189	4,406	739	20.2%
Home-Based Primary Care	2,609	3,211	3,715	1,106	42.4%	Home Hospice Care	2,676	3,122	3,161	485	18.1%
Home Telehealth	7,291	7,945	7,979	688	9.4%	Homemaker/Home Health Aide Programs	117,137	167,690	195,414	78,277	66.8%



* Provided at procedure level given the limited RVU reporting for these services

Source: BY17 EHCPM Utilization Projections

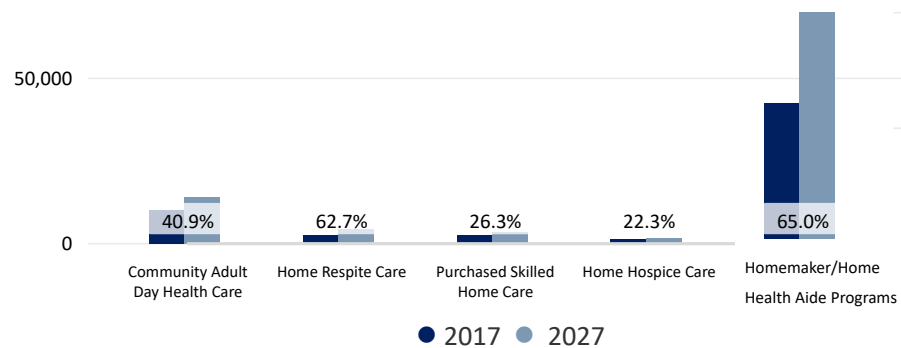
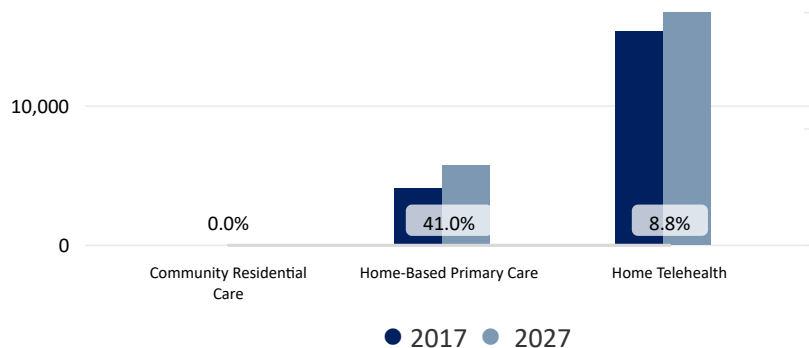
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VISN 10: MichErie Market — Battle Creek

Demand ► Outpatient Parent Facility Utilization Projections by Health Systems Planning Category (HSPC) Ambulatory Long Term Support Services — Battle Creek VAMC

BY17 Battle Creek VAMC In-House LTSS Utilization Projections (RVUs)						BY17 Battle Creek VAMC Community LTSS Utilization Projections (Procedures)*					
	FY17	FY22	FY27	10 Year Change	10 Year % Change		FY17	FY22	FY27	10 Year Change	10 Year % Change
SCI&D Home Care	N/A	N/A	N/A	N/A	N/A	Community Adult Day Health Care	10,032	12,461	14,133	4,101	40.9%
VA Adult Day Health Care	N/A	N/A	N/A	N/A	N/A	Home Respite Care	2,646	3,507	4,305	1,659	62.7%
Community Residential Care	0	0	0	0	0.0%	Purchased Skilled Home Care	2,689	3,198	3,397	708	26.3%
Home-Based Primary Care	4,109	5,002	5,793	1,684	41.0%	Home Hospice Care	1,291	1,564	1,579	288	22.3%
Home Telehealth	15,362	16,563	16,716	1,354	8.8%	Homemaker/Home Health Aide Programs	42,361	60,037	69,899	27,538	65.0%



* Provided at procedure level given the limited RVU reporting for these services

Source: BY17 EHCPM Utilization Projections

3.13.V10.MichErie.515



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Overall Outpatient Commercial Demand – Ann Arbor-Michigan Area

• Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits				Growth Projections		
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
General/Family Practice	5,763,363	6,034,648	6,379,754	271,285	4.7%	616,392	10.7%
Internal Medicine	3,459,060	3,743,110	4,056,694	284,050	8.2%	597,634	17.3%
Primary Care Total	9,222,423	9,777,758	10,436,448	555,335	6.0%	1,214,025	13.2%
Allergy/Immunology	180,971	192,784	206,795	11,813	6.5%	25,824	14.3%
Cardiology	1,039,211	1,194,619	1,353,388	155,408	15.0%	314,176	30.2%
Dermatology	831,356	909,526	993,144	78,170	9.4%	161,788	19.5%
Endocrinology	248,379	265,507	285,101	17,129	6.9%	36,723	14.8%
Gastroenterology	375,252	409,796	447,135	34,544	9.2%	71,882	19.2%
Hematology/Oncology	853,195	979,224	1,107,583	126,029	14.8%	254,388	29.8%
Infectious Disease	50,770	55,419	60,427	4,650	9.2%	9,657	19.0%
Nephrology	156,429	180,644	205,482	24,215	15.5%	49,054	31.4%
Neurology	342,136	367,051	394,354	24,915	7.3%	52,218	15.3%
Pain Management	179,434	200,852	223,506	21,417	11.9%	44,071	24.6%
Pulmonology	231,302	259,019	288,014	27,718	12.0%	56,712	24.5%
Rheumatology	218,575	237,756	258,938	19,181	8.8%	40,362	18.5%
Vascular	65,100	76,327	87,773	11,227	17.2%	22,672	34.8%
Specialty Care (Medicine) Sub-Total	4,772,110	5,328,525	5,911,639	556,415	11.7%	1,139,529	23.9%
Cardio/Thoracic Surgery	28,493	31,605	34,781	3,112	10.9%	6,288	22.1%
Colorectal Surgery	25,845	27,871	30,134	2,026	7.8%	4,289	16.6%
General Surgery	320,022	348,132	378,003	28,110	8.8%	57,980	18.1%
Neurosurgery	67,677	72,068	77,011	4,391	6.5%	9,334	13.8%
Ophthalmology	1,002,452	1,130,014	1,264,116	127,562	12.7%	261,664	26.1%
Orthopedic Surgery	877,193	947,660	1,024,511	70,467	8.0%	147,318	16.8%
Otolaryngology	375,554	403,633	435,042	28,078	7.5%	59,488	15.8%
Plastic Surgery	68,425	73,971	80,019	5,546	8.1%	11,594	16.9%
Urology	441,066	495,773	553,288	54,707	12.4%	112,222	25.4%
Specialty Care (Surgery) Sub-Total	3,206,727	3,530,727	3,876,905	324,000	10.1%	670,178	20.9%
Medicine/Surgery Total	7,978,837	8,859,252	9,788,544	880,415	11.0%	1,809,707	22.7%
Obstetrics/Gynecology	1,033,756	1,062,796	1,108,386	29,040	2.8%	74,630	7.2%
Women's Health Total	1,033,756	1,062,796	1,108,386	29,040	2.8%	74,630	7.2%
Psychiatry	718,741	729,172	753,325	10,431	1.5%	34,584	4.8%
Mental Health Total	718,741	729,172	753,325	10,431	1.5%	34,584	4.8%
Physical Medicine/Rehab	222,954	241,477	262,123	18,523	8.3%	39,169	17.6%
Rehab Total	222,954	241,477	262,123	18,523	8.3%	39,169	17.6%
Emergency/Critical Care	2,362,423	2,547,805	2,729,432	185,382	7.8%	367,009	15.5%



VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Overall Outpatient Commercial Demand – Ann Arbor-Michigan Area, cont.

- Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits				Growth Projections		
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
Emergency Services Total	2,362,423	2,547,805	2,729,432	185,382	7.8%	367,009	15.5%
Nurse Practitioner	804,956	878,921	960,862	73,966	9.2%	155,907	19.4%
Physician Assistant	553,748	613,431	677,691	59,683	10.8%	123,943	22.4%
Other Services Total	1,358,704	1,492,352	1,638,553	133,649	9.8%	279,850	20.6%
Grand Total	22,897,838	24,710,613	26,716,812	1,812,775	7.9%	3,818,974	16.7%



VISN 10: MichErie Market — Battle Creek

Demand ► Overall Outpatient Commercial Demand – Battle Creek Area

• Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits				Growth Projections		
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
General/Family Practice	1,087,724	1,143,614	1,216,791	55,890	5.1%	129,067	11.9%
Internal Medicine	621,685	671,034	727,374	49,349	7.9%	105,689	17.0%
Primary Care Total	1,709,409	1,814,648	1,944,165	105,239	6.2%	234,757	13.7%
Allergy/Immunology	34,531	36,740	39,463	2,209	6.4%	4,932	14.3%
Cardiology	183,595	209,944	237,314	26,349	14.4%	53,719	29.3%
Dermatology	164,332	178,013	193,364	13,681	8.3%	29,032	17.7%
Endocrinology	46,037	49,085	52,686	3,048	6.6%	6,648	14.4%
Gastroenterology	71,369	77,819	84,963	6,450	9.0%	13,595	19.0%
Hematology/Oncology	147,831	168,767	190,396	20,936	14.2%	42,565	28.8%
Infectious Disease	9,348	10,164	11,070	816	8.7%	1,722	18.4%
Nephrology	28,234	32,434	36,810	4,200	14.9%	8,576	30.4%
Neurology	62,311	66,879	72,079	4,569	7.3%	9,768	15.7%
Pain Management	32,503	36,238	40,279	3,735	11.5%	7,776	23.9%
Pulmonology	41,533	46,219	51,218	4,686	11.3%	9,685	23.3%
Rheumatology	38,419	41,514	45,035	3,095	8.1%	6,615	17.2%
Vascular	11,682	13,635	15,655	1,953	16.7%	3,973	34.0%
Specialty Care (Medicine) Sub-Total	871,724	967,452	1,070,330	95,727	11.0%	198,606	22.8%
Cardio/Thoracic Surgery	5,290	5,843	6,417	553	10.5%	1,127	21.3%
Colorectal Surgery	4,917	5,297	5,735	380	7.7%	818	16.6%
General Surgery	60,509	65,822	71,648	5,314	8.8%	11,140	18.4%
Neurosurgery	12,876	13,690	14,638	814	6.3%	1,762	13.7%
Ophthalmology	172,113	192,537	214,448	20,425	11.9%	42,335	24.6%
Orthopedic Surgery	168,874	181,159	195,249	12,286	7.3%	26,376	15.6%
Otolaryngology	73,443	78,569	84,587	5,126	7.0%	11,144	15.2%
Plastic Surgery	13,145	14,219	15,424	1,075	8.2%	2,280	17.3%
Urology	80,524	89,433	99,074	8,909	11.1%	18,550	23.0%
Specialty Care (Surgery) Sub-Total	591,690	646,571	707,221	54,881	9.3%	115,531	19.5%
Medicine/Surgery Total	1,463,414	1,614,023	1,777,551	150,609	10.3%	314,137	21.5%
Obstetrics/Gynecology	200,645	210,020	223,558	9,374	4.7%	22,913	11.4%
Women's Health Total	200,645	210,020	223,558	9,374	4.7%	22,913	11.4%
Psychiatry	135,829	139,995	146,898	4,166	3.1%	11,069	8.1%
Mental Health Total	135,829	139,995	146,898	4,166	3.1%	11,069	8.1%
Physical Medicine/Rehab	41,298	44,592	48,384	3,294	8.0%	7,086	17.2%
Rehab Total	41,298	44,592	48,384	3,294	8.0%	7,086	17.2%
Emergency/Critical Care	454,323	494,967	536,593	40,644	8.9%	82,270	18.1%



VISN 10: MichErie Market — Battle Creek

Demand ► Overall Outpatient Commercial Demand – Battle Creek Area, cont.

- Overview:

- ✓ Outpatient demand estimates (patient visits) were also developed to understand current and future expected commercial outpatient demand
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Patient Visits			Growth Projections			
	2018	2023	2028	5 Year Chg	% Chg	10 Year Chg	% Chg
Emergency Services Total	454,323	494,967	536,593	40,644	8.9%	82,270	18.1%
Nurse Practitioner	147,959	161,659	177,326	13,700	9.3%	29,367	19.8%
Physician Assistant	100,125	110,885	122,808	10,760	10.7%	22,684	22.7%
Other Services Total	248,084	272,544	300,135	24,460	9.9%	52,051	21.0%
Grand Total	4,253,002	4,590,788	4,977,284	337,786	7.9%	724,282	17.0%



Demand ▶ Estimated Current and Historic Market Demand — Inpatient



VISN 10: MichErie Market – Ann Arbor-Michigan

Demand ► Inpatient Demand and CMI – Ann Arbor-Michigan

Operating Beds from PTF Cube					Operating Beds Reported by Field	Average Daily Census (ADC)				
Bed Service	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	FY15-18 Change %
Medical	61	61	61	61	61	46.7	46.0	46.2	46.6	-0.2%
Surgery	30	23	23	23	23	21.2	18.7	21.1	17.4	-17.9%
Neurology	N/A	N/A	N/A	N/A	0	0.9	1.3	0.7	0.7	-22.2%
Total Med/Surg	91	84	84	84	84	68.8	66.0	68.0	64.7	-6.0%
Mental Health	18	18	18	18	18	16.3	14.7	15.9	15.3	-6.1%
R RTP*	N/A	N/A	N/A	N/A	0	0.1	N/A	N/A	N/A	-100.0%
CLC	46	46	46	46	40	35.4	37.8	39.6	39.0	10.2%
VAMC Total	155	148	148	148	142	120.6	118.5	123.5	119.0	-1.3%

Facility	VAMC Case Mix Index ³								Commercial Provider Case Mix Index ⁴	
	2015 Unique	2016 Unique	2017 Unique	2018 Unique	2015 CMI	2016 CMI	2017 CMI	2018 CMI	Median CMI*	High CMI**
(506) Ann Arbor-Michigan	3,553	3,447	3,432	3,277	1.47	1.30	1.50	1.47	1.61	3.05

*R RTP includes Domiciliary and CWT/TR Bed Services

**Market: Within a 60 minute drive time of the VAMC

Source: 1. Beds reported by the field in GFI submission 2. VSSC Beds Using PTF Cube 3. MCAO Discharge Cube 4. CMI (acute inpatient care) based on Medicare only population from 2018 CMS Cost Reports



VISN 10: MichErie Market – Battle Creek

Demand ► Inpatient Demand and CMI – Battle Creek

Operating Beds from PTF Cube					Operating Beds Reported by Field	Average Daily Census (ADC)				
Bed Service	FY15	FY16	FY17	FY18		FY15	FY16	FY17	FY18	FY15-18 Change %
Medical	11	11	11	11	11	5.9	4.7	3.2	3.3	-44.1%
Total Med/Surg	11	11	11	11	11	5.9	4.7	3.2	3.3	-44.1%
Mental Health	55	55	55	55	55	45.1	45.4	41.9	35.6	-21.1%
Blind	0	0	0	0	3	0	0	0	0	N/A
R RTP*	101	101	101	101	101	81.0	76.8	75.2	72.3	-10.7%
CLC	109	109	109	109	75	73.9	73.5	77.5	71.0	-3.9%
VAMC Total	276	276	276	276	245	205.9	200.4	197.8	182.2	-11.5%

Facility	VAMC Case Mix Index ³								Commercial Provider Case Mix Index ⁴	
	2015 Unique	2016 Unique	2017 Unique	2018 Unique	2015 CMI	2016 CMI	2017 CMI	2018 CMI	Median CMI*	High CMI**
(515) Battle Creek	398	337	273	298	0.81	0.87	0.88	1.02	1.61	1.97

*R RTP includes Domiciliary and CWT/TR Bed Services

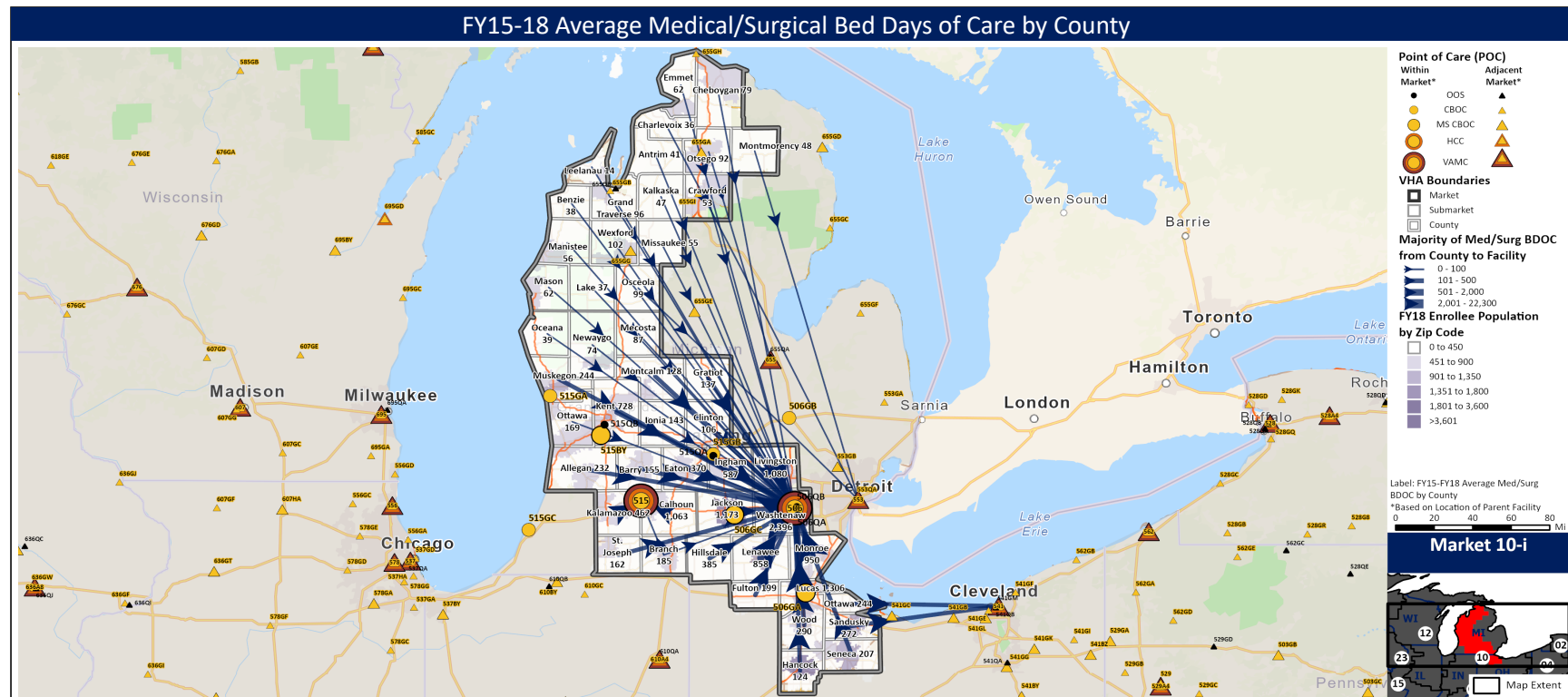
**Market: Within a 60 minute drive time of the VAMC

Source: 1. Beds reported by the field in GFI submission 2. VSSC Beds Using PTF Cube 3. MCAO Discharge Cube 4. CMI (acute inpatient care) based on Medicare only population from 2018 CMS Cost Reports



VISN 10: MichErie Market

Demand ► Medical/Surgical Bed Days of Care (BDOC) – FY15-18



Source: 1. VSSC Treating Specialty Cube 2. Geocoded Enrollee File FY18Q4

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VISN 10: MichErie Market

Demand ► Medical/Surgical BDOC — FY15-18, cont.

County	FY18 BDOC	FY18 ADC	% ADC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Allegan, MI	216	0.6	23.2%	233	(V10) (506) Ann Arbor-Michigan	56.0%
Antrim, MI	7	0.2	4.3%	41	(V10) (506) Ann Arbor-Michigan	71.4%
Barry, MI	176	0.5	28.4%	155	(V10) (506) Ann Arbor-Michigan	71.0%
Benzie, MI	71	0.2	46.4%	38	(V10) (506) Ann Arbor-Michigan	69.0%
Branch, MI	115	0.3	15.5%	185	(V10) (515) Battle Creek	36.5%
Branch, MI	115	0.3	15.5%	185	(V10) (506) Ann Arbor-Michigan	36.5%
Calhoun, MI	932	2.6	21.9%	1,063	(V10) (515) Battle Creek	45.5%
Charlevoix, MI	9	0.2	6.2%	37	(V10) (553) Detroit-Michigan	44.4%
Cheboygan, MI	107	0.3	34.0%	79	(V10) (506) Ann Arbor-Michigan	86.0%
Clinton, MI	61	0.2	14.4%	106	(V10) (506) Ann Arbor-Michigan	93.4%
Crawford, MI	51	0.1	23.9%	53	(V10) (506) Ann Arbor-Michigan	86.3%
Eaton, MI	299	0.8	20.2%	370	(V10) (506) Ann Arbor-Michigan	82.3%
Emmet, MI	67	0.2	26.8%	63	(V10) (506) Ann Arbor-Michigan	68.7%
Grand Traverse, MI	71	0.2	18.5%	96	(V10) (506) Ann Arbor-Michigan	73.2%
Gratiot, MI	143	0.4	26.1%	137	(V10) (506) Ann Arbor-Michigan	76.2%
Hillsdale, MI	445	1.2	28.9%	385	(V10) (506) Ann Arbor-Michigan	91.2%
Ingham, MI	585	1.6	24.9%	587	(V10) (506) Ann Arbor-Michigan	79.5%
Ionia, MI	79	0.2	13.8%	143	(V10) (506) Ann Arbor-Michigan	57.0%



VISN 10: MichErie Market

Demand ► Medical/Surgical BDOC — FY15-18, cont.

County	FY18 BDOC	FY18 ADC	% ADC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Jackson, MI	1,155	3.2	24.6%	1,173	(V10) (506) Ann Arbor-Michigan	94.2%
Kalamazoo, MI	339	0.9	18.4%	462	(V10) (515) Battle Creek	43.1%
Kalkaska, MI	61	0.2	32.3%	47	(V10) (506) Ann Arbor-Michigan	68.9%
Kent, MI	598	1.6	20.5%	728	(V10) (506) Ann Arbor-Michigan	57.9%
Lake, MI	42	0.1	28.2%	37	(V10) (506) Ann Arbor-Michigan	66.7%
Leelanau, MI	11	0.0	20.4%	14	(V10) (506) Ann Arbor-Michigan	54.5%
Lenawee, MI	882	2.4	25.7%	858	(V10) (506) Ann Arbor-Michigan	98.3%
Livingston, MI	1,296	3.6	30.0%	1,080	(V10) (506) Ann Arbor-Michigan	98.6%
Manistee, MI	69	0.2	31.1%	56	(V10) (506) Ann Arbor-Michigan	79.7%
Mason, MI	56	0.2	22.5%	62	(V10) (506) Ann Arbor-Michigan	67.9%
Mecosta, MI	81	0.2	23.3%	87	(V10) (506) Ann Arbor-Michigan	53.1%
Missaukee, MI	76	0.2	34.4%	55	(V10) (506) Ann Arbor-Michigan	77.6%
Monroe, MI	1,023	2.8	26.9%	950	(V10) (506) Ann Arbor-Michigan	91.7%
Montcalm, MI	120	0.3	23.4%	128	(V10) (506) Ann Arbor-Michigan	78.3%
Montmorency, MI	18	0.0	9.4%	48	(V10) (553) Detroit-Michigan	33.3%
Muskegon, MI	283	0.8	29.1%	244	(V10) (506) Ann Arbor-Michigan	75.6%
Newaygo, MI	69	0.2	23.3%	74	(V10) (506) Ann Arbor-Michigan	91.3%
Oceana, MI	27	0.1	17.4%	39	(V10) (506) Ann Arbor-Michigan	74.1%



VISN 10: MichErie Market

Demand ► Medical/Surgical BDOC — FY15-18, cont.

County	FY18 BDOC	FY18 ADC	% ADC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Osceola, MI	40	0.1	10.1%	99	(V10) (553) Detroit-Michigan	42.5%
Otsego, MI	18	0.0	4.9%	92	(V10) (655) Saginaw-Michigan	44.4%
Ottawa, MI	164	0.9	24.3%	169	(V10) (506) Ann Arbor-Michigan	59.1%
Saint Joseph, MI	226	0.6	34.8%	163	(V10) (506) Ann Arbor-Michigan	71.2%
Washtenaw, MI	2,847	7.8	29.7%	2,396	(V10) (506) Ann Arbor-Michigan	94.1%
Wexford, MI	108	0.3	26.5%	102	(V10) (506) Ann Arbor-Michigan	92.6%
Fulton, OH	157	0.4	19.7%	199	(V10) (506) Ann Arbor-Michigan	88.5%
Hancock, OH	77	0.2	15.5%	124	(V10) (506) Ann Arbor-Michigan	85.7%
Lucas, OH	1,513	4.1	29.0%	1,306	(V10) (506) Ann Arbor-Michigan	81.0%
Ottawa, OH	317	0.9	32.4%	245	(V10) (541) Cleveland-Ohio	58.4%
Sandusky, OH	291	0.8	26.7%	273	(V10) (541) Cleveland-Ohio	50.9%
Seneca, OH	181	0.5	21.9%	207	(V10) (506) Ann Arbor-Michigan	87.3%
Wood, OH	295	0.8	25.5%	290	(V10) (506) Ann Arbor-Michigan	96.9%
Total	15,989	N/A	N/A	15,757		N/A



VISN 10: MichErie Market

Demand ► Top DRGs for Medicine in FY18

	DRG	In Market BDOC	In Market BDOC % of Total	In and Out of Market BDOC	In and Out of Market % of Total BDOC
(V10) (506) Ann Arbor-Michigan	O (291) Heart Failure & Shock W Mcc	347	4.0%	641	4.0%
	O (292) Heart Failure & Shock W Cc	369	4.2%	556	3.5%
	O (871) Septicemia W/o Mv 96+ Hours W Mcc	260	3.0%	509	3.2%
	O (603) Cellulitis W/o Mcc	225	2.6%	419	2.6%
	O (641) Nutritional & Misc Metabolic Disorders W/o Mcc	188	2.2%	415	2.6%
	O (189) Pulmonary Edema & Respiratory Failure	226	2.6%	385	2.4%
	O (309) Cardiac Arrhythmia & Conduction Disorders W Cc	221	2.5%	359	2.3%
	O (638) Diabetes W Cc	188	2.2%	330	2.1%
	O (287) Circulatory Disorders Except Ami, W Card Cath W/o Mcc	173	2.0%	305	1.9%
	O (57) Degenerative Nervous System Disorders W/o Mcc	195	2.2%	271	1.7%
	Other	6317	72.5%	11747	73.7%
(V10) (515) Battle Creek	Total	8709	100.0%	15937	100.0%
	O (603) Cellulitis W/o Mcc	163	19.8%	178	18.1%
	O (189) Pulmonary Edema & Respiratory Failure	43	5.2%	53	5.4%
	O (194) Simple Pneumonia & Pleurisy W Cc	42	5.1%	46	4.7%
	O (292) Heart Failure & Shock W Cc	35	4.3%	46	4.7%
	O (872) Septicemia W/o Mv 96+ Hours W/o Mcc	43	5.2%	43	4.4%
	O (57) Degenerative Nervous System Disorders W/o Mcc	36	4.4%	40	4.1%
	O (540) Osteomyelitis W Cc	28	3.4%	34	3.5%
	O (641) Nutritional & Misc Metabolic Disorders W/o Mcc	31	3.8%	34	3.5%
	O (190) Chronic Obstructive Pulmonary Disease W Mcc	24	2.9%	29	2.9%
	O (177) Respiratory Infections & Inflammations W Mcc	25	3.0%	25	2.5%
	Other	352	42.8%	456	46.3%
	Total	822	100.0%	984	100.0%



VISN 10: MichErie Market

Demand ► Top Medicine DRGs in the Community and Outside of the Market

	DRG	FY18 BDOC	% of Total BDOC
VA Care Outside of the Market	(949) AFTERCARE W CC/MCC	99	7.6%
	(314) OTHER CIRCULATORY SYSTEM DIAGNOSES W MCC	75	5.8%
	(291) HEART FAILURE & SHOCK W MCC	67	5.1%
	(57) DEGENERATIVE NERVOUS SYSTEM DISORDERS W/O MCC	62	4.8%
	(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	45	3.5%
	(603) CELLULITIS W/O MCC	40	3.1%
	(194) SIMPLE PNEUMONIA & PLEURISY W CC	39	3.0%
	(309) CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	38	2.9%
	(190) CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	25	1.9%
	(552) MEDICAL BACK PROBLEMS W/O MCC	25	1.9%
	Other	789	60.5%
	Total	1,304	100.0%
Care in the Community	(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	446	10.4%
	(190) CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	262	6.1%
	(291) HEART FAILURE & SHOCK W MCC	244	5.7%
	(189) PULMONARY EDEMA & RESPIRATORY FAILURE	161	3.8%
	(287) CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	107	2.5%
	(193) SIMPLE PNEUMONIA & PLEURISY W MCC	92	2.1%
	(65) INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC OR TPA IN 24 HRS	88	2.1%
	(280) ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	80	1.9%
	(378) G.I. HEMORRHAGE W CC	74	1.7%
	(870) SEPTICEMIA OR SEVERE SEPSIS W MV >96 HOURS	73	1.7%
	Other	2,659	62.0%
	Total	4,286	100.0%

Note: Enrollees enrolled in a market and received care at a facility outside of their market

Sources: 1. VSSC Treating Specialty Cube 2. VHA Office of Community Care

4.13.V10.MichErie



VISN 10: MichErie Market

Demand ► Top DRGs for Surgery in FY18

	DRG	In Market BDOC	In Market BDOC % of Total	In and Out of Market BDOC	In and Out of Market % of Total BDOC
(V10) (506) Ann Arbor-Michigan	O (330) Major Small & Large Bowel Procedures W Cc	202	5.8%	420	6.6%
	O (470) Major Joint Replacement Or Reattachment Of Lower Extremity W/o Mcc	198	5.7%	333	5.2%
	O (236) Coronary Bypass W/o Cardiac Cath W/o Mcc	138	3.9%	317	5.0%
	O (981) Extensive O.r. Procedure Unrelated To Principal Diagnosis W Mcc	127	3.6%	180	2.8%
	O (331) Major Small & Large Bowel Procedures W/o Cc/mcc	101	2.9%	173	2.7%
	O (617) Amputat Of Lower Limb For Endocrine,nutrit,& Metabol Dis W Cc	93	2.7%	165	2.6%
	O (254) Other Vascular Procedures W/o Cc/mcc	69	2.0%	146	2.3%
	O (221) Cardiac Valve & Oth Maj Cardiothoracic Proc W/o Card Cath W/o Cc/mcc	70	2.0%	122	1.9%
	O (267) Tc - Viral Illness & Fever Age 0-17	74	2.1%	120	1.9%
	O (329) Major Small & Large Bowel Procedures W Mcc	52	1.5%	119	1.9%
	Other	2,377	67.9%	4,273	67.1%
	Total	3,501	100.0%	6,368	100.0%



VISN 10: MichErie Market

Demand ► Top Surgery DRGs in the Community and Outside of the Market

	DRG	FY18 BDOC	% of Total BDOC
VA Care Outside of the Market	(470) MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	127	20.5%
	(253) OTHER VASCULAR PROCEDURES W CC	40	6.5%
	(330) MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	37	6.0%
	(653) MAJOR BLADDER PROCEDURES W MCC	33	5.3%
	(853) INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	26	4.2%
	(4) TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.	24	3.9%
	(326) STOMACH, ESOPHAGEAL & DUODENAL PROC W MCC	23	3.7%
	(673) OTHER KIDNEY & URINARY TRACT PROCEDURES W MCC	17	2.7%
	(489) KNEE PROCEDURES W/O PDX OF INFECTION W/O CC/MCC	14	2.3%
	(464) WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W CC	14	2.3%
	Other	264	42.6%
	Total	619	100.0%
Care in the Community	(853) INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	197	6.0%
	(3) ECMO OR TRACH W MV >96 HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.	164	5.0%
	(233) CORONARY BYPASS W CARDIAC CATH W MCC	136	4.2%
	(247) PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	105	3.2%
	(617) AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS W CC	95	2.9%
	(219) CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH W MCC	91	2.8%
	(270) OTHER MAJOR CARDIOVASCULAR PROCEDURES W MCC	72	2.2%
	(460) SPINAL FUSION EXCEPT CERVICAL W/O MCC	72	2.2%
	(854) INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W CC	72	2.2%
	(470) MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	70	2.1%
	Other	2,195	67.1%
	Total	3,269	100.0%

Note: Enrollees enrolled in a market and received care at a facility outside of their market

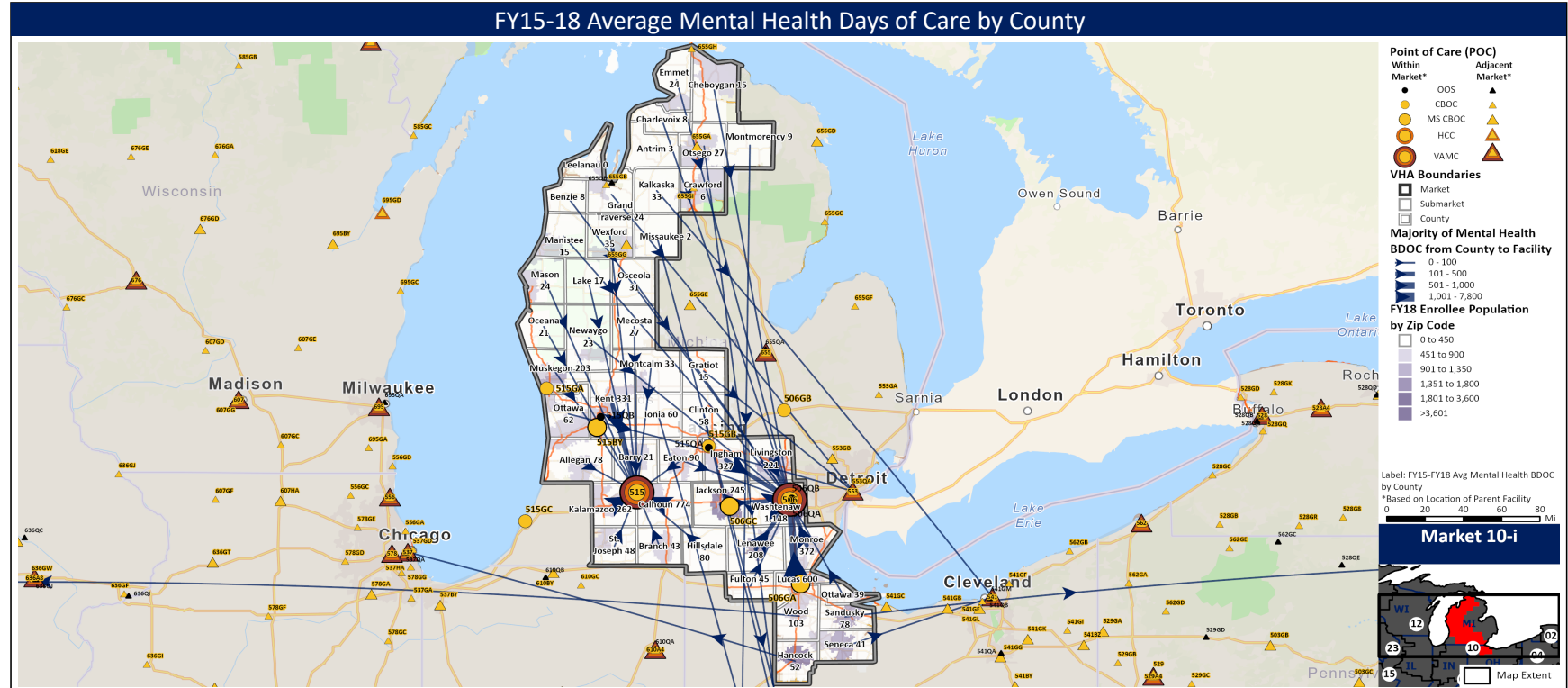
Sources: 1. VSSC Treating Specialty Cube 2. VHA Office of Community Care

4.14.V10.MichErie



VISN 10: MichErie Market

Demand ► Mental Health BDOC – FY15-18



Source: 1. VSSC Treating Specialty Cube 2. Geocoded Enrollee File FY18Q4

4.4.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Mental Health BDOC – FY15-18, cont.

County	FY18 BDOC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Allegan, MI	45	79	(V10) (515) Battle Creek	48.9%
Antrim, MI	N/A	4	(V10) (506) Ann Arbor-Michigan	N/A
Barry, MI	33	21	(V10) (515) Battle Creek	42.4%
Benzie, MI	13	8	(V10) (506) Ann Arbor-Michigan	69.2%
Branch, MI	85	44	(V10) (515) Battle Creek	75.3%
Calhoun, MI	842	775	(V10) (515) Battle Creek	56.9%
Charlevoix, MI	11	9	(V10) (506) Ann Arbor-Michigan	54.5%
Cheboygan, MI	19	16	(V10) (506) Ann Arbor-Michigan	94.7%
Clinton, MI	47	59	(V08) (546) Miami	63.8%
Crawford, MI	N/A	6	(V08) (573) Gainesville	N/A
Eaton, MI	66	90	(V10) (506) Ann Arbor-Michigan	45.5%
Emmet, MI	52	25	(V10) (506) Ann Arbor-Michigan	57.7%
Grand Traverse, MI	24	24	(V10) (553) Detroit-Michigan	45.8%
Gratiot, MI	8	16	(V10) (553) Detroit-Michigan	62.5%
Hillsdale, MI	83	81	(V10) (515) Battle Creek	43.4%
Ingham, MI	346	327	(V10) (506) Ann Arbor-Michigan	59.0%
Ionia, MI	84	61	(V08) (548) West Palm Beach	46.4%
Jackson, MI	202	246	(V10) (506) Ann Arbor-Michigan	69.8%
Kalamazoo, MI	203	262	(V10) (515) Battle Creek	78.3%
Kalkaska, MI	62	33	(V10) (541) Cleveland-Ohio	38.7%



VISN 10: MichErie Market

Demand ► Mental Health BDOC – FY15-18, cont.

County	FY18 BDOC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Kent, MI	265	331	(V10) (515) Battle Creek	37.7%
Lake, MI	42	17	(V10) (515) Battle Creek	73.8%
Leelanau, MI	N/A	1	(V10) (515) Battle Creek	N/A
Lenawee, MI	326	209	(V10) (506) Ann Arbor-Michigan	87.4%
Livingston, MI	133	222	(V10) (506) Ann Arbor-Michigan	92.5%
Manistee, MI	13	15	(V10) (506) Ann Arbor-Michigan	100.0%
Mason, MI	12	25	(V10) (515) Battle Creek	100.0%
Mecosta, MI	7	27	(V10) (515) Battle Creek	71.4%
Missaukee, MI	3	2	(V08) (548) West Palm Beach	100.0%
Monroe, MI	328	373	(V10) (506) Ann Arbor-Michigan	90.2%
Montcalm, MI	23	34	(V10) (515) Battle Creek	60.9%
Montmorency, MI	26	9	(V07) (508) Atlanta-Georgia	73.1%
Muskegon, MI	126	204	(V10) (515) Battle Creek	47.6%
Newaygo, MI	36	24	(V10) (506) Ann Arbor-Michigan	38.9%
Oceana, MI	28	21	(V10) (515) Battle Creek	82.1%
Osceola, MI	10	31	(V10) (506) Ann Arbor-Michigan	60.0%
Otsego, MI	7	28	(V08) (573) Gainesville	57.1%
Ottawa, MI	71	62	(V10) (553) Detroit-Michigan	47.9%
Saint Joseph, MI	55	48	(V10) (515) Battle Creek	49.1%
Washtenaw, MI	903	1,148	(V10) (506) Ann Arbor-Michigan	73.2%



VISN 10: MichErie Market

Demand ► Mental Health BDOC – FY15-18, cont.

County	FY18 BDOC	FY15-18 AVG BDOC	Majority Receiving Facility	% BDOC
Wexford, MI	30	35	(V10) (515) Battle Creek	60.0%
Fulton, OH	43	45	(V10) (506) Ann Arbor-Michigan	48.8%
Hancock, OH	62	52	(V12) (537) Chicago-Illinois	51.6%
Lucas, OH	783	600	(V10) (506) Ann Arbor-Michigan	84.7%
Ottawa, OH	16	39	(V10) (506) Ann Arbor-Michigan	68.8%
Sandusky, OH	59	78	(V01) (650) Providence	40.7%
Seneca, OH	52	41	(V10) (541) Cleveland-Ohio	46.2%
Wood, OH	102	104	(V21) (640) Palo Alto-California	52.0%
Total	5,786	6,008		



VISN 10: MichErie Market

Demand ► Top DRGs for Mental Health in FY18

	DRG	In Market BDOC	In Market BDOC % of Total	In and Out of Market BDOC	In and Out of Market % of Total BDOC
(V10) (506) Ann Arbor-Michigan	N (885) Psychoses	1484	54.7%	2627	55.7%
	N (881) Depressive neuroses	635	23.4%	1035	21.9%
	N (882) Neuroses except depressive	168	6.2%	401	8.5%
	O (884) Organic Disturbances & Mental Retardation	295	10.9%	375	8.0%
	O (880) Acute Adjustment Reaction & Psychosocial Dysfunction	71	2.6%	166	3.5%
	O (883) Disorders Of Personality & Impulse Control	53	2.0%	83	1.8%
	O (886) Behavioral & Developmental Disorders			16	0.3%
	N (887) Other mental disorder diagnoses	9	0.3%	14	0.3%
	Total	2715	100.0%	4717	100.0%
(V10) (515) Battle Creek	N (885) Psychoses	754	65.6%	1174	71.0%
	N (882) Neuroses except depressive	266	23.1%	334	20.2%
	O (884) Organic Disturbances & Mental Retardation	56	4.9%	58	3.5%
	N (881) Depressive neuroses	47	4.1%	50	3.0%
	O (880) Acute Adjustment Reaction & Psychosocial Dysfunction	24	2.1%	30	1.8%
	O (883) Disorders Of Personality & Impulse Control	3	0.3%	7	0.4%
	Total	1150	100.0%	1653	100.0%



VISN 10: MichErie Market

Demand ► Top Mental Health DRGs in the Community and Outside of the Market

	DRG	FY18 BDOC	% of Total BDOC
VA Care Outside of the Market	(885) PSYCHOSES	556	55.8%
	(882) NEUROSES EXCEPT DEPRESSIVE	131	13.2%
	(884) ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	110	11.0%
	(881) DEPRESSIVE NEUROSES	105	10.5%
	(880) ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	66	6.6%
	(883) DISORDERS OF PERSONALITY & IMPULSE CONTROL	28	2.8%
	Total	996	100.0%
Care in the Community	(885) PSYCHOSES	339	73.7%
	(882) NEUROSES EXCEPT DEPRESSIVE	55	12.0%
	(884) ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	38	8.3%
	(881) DEPRESSIVE NEUROSES	25	5.4%
	(880) ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	3	0.7%
	(883) DISORDERS OF PERSONALITY & IMPULSE CONTROL	0	0.0%
	Total	460	100.0%

*Enrollees enrolled in a market and received care at a facility outside of their market

Sources: 1. VSSC Treating Specialty Cube 2. VHA Office of Community Care

4.15.V10.MichErie



VISN 10: MichErie Market – Ann Arbor-Michigan

Demand ► Community Care (Inpatient)

FY16-18 Medicine NVCC (ADC)			
Vendor	FY16	FY17	FY18
MEDICAL COLLEGE OF OHIO	0.6	0.2	0.3
REGENTS OF U OF UMH	1.0	0.8	0.9
All Other Vendors	1.0	0.8	0.5
Community Total (ADC)	2.6	1.8	1.6

FY16-18 Surgery NVCC (ADC)			
Vendor	FY16	FY17	FY18
REGENTS OF U OF UMH	2.7	1.5	1.9
TOLEDO HOSPITAL	0.0	0.0	0.2
All Other Vendors	0.7	0.4	0.5
Community Total (ADC)	3.5	1.9	2.6

FY16-18 Psych NVCC (ADC)			
Vendor	FY16	FY17	FY18
MORIAH INC DBA/EISENHOWER CTR	N/A	N/A	0.1
FLOWER HOSPITAL - PSYCH	0.1	0.1	0.0
MCLAREN REGL MED CTR	0.0	N/A	0.0
ST JOSEPH MERCY CHELSEA	N/A	N/A	0.0
CHELSEA HOSPITAL	0.0	N/A	0.0
All Other Vendors	0.6	0.3	0.1
Community Total (ADC)	0.7	0.4	0.3



VISN 10: MichErie Market – Battle Creek

Demand ► Community Care (Inpatient)

FY16-18 Medicine NVCC (ADC)			
Vendor	FY16	FY17	FY18
METROPOLITAN HOSPITAL	0.7	0.7	0.8
LAKELAND MEDICAL CENTER	0.5	0.3	0.5
INGHAM REGIONAL MEDICAL CENTER	0.2	0.2	0.2
HACKLEY HOSP MHP HACKLEY CAMPUS	0.2	0.4	0.2
BRONSON BATTLE CREEK HOSPITAL	1.7	1.9	1.8
BRONSON METHODIST HOSPITAL	1.1	1.4	1.7
BORGESS MEDICAL CENTER	2.0	1.5	1.6
SPECTRUM HEALTH DOWNTOWN	1.2	1.0	1.3
All Other Vendors	1.5	0.9	1.2
Community Total (ADC)	9.1	8.2	9.3

FY16-18 Surgery NVCC (ADC)			
Vendor	FY16	FY17	FY18
BORGESS MEDICAL CENTER	0.7	0.8	0.9
SPECTRUM HEALTH DOWNTOWN	0.6	0.5	0.9
BRONSON METHODIST HOSPITAL	0.9	0.4	0.9
METROPOLITAN HOSPITAL	0.2	0.2	0.7
BRONSON BATTLE CREEK HOSPITAL	0.7	0.6	0.6
REGENTS OF U OF UMH	0.1	0.1	0.3
INGHAM REGIONAL MEDICAL CENTER	0.0	0.1	0.2
LAKELAND MEDICAL CENTER	0.2	0.1	0.2
All Other Vendors	0.5	0.5	0.5
Community Total (ADC)	3.9	3.3	5.3

FY16-18 Psych NVCC (ADC)			
Vendor	FY16	FY17	FY18
MERCY HOSPITAL MUSKEGON SMHC	N/A	N/A	0.0
EDWARD W SPARROW HOSPITAL	N/A	N/A	0.0
BORGESS MEDICAL CENTER	0.0	0.1	0.0
BRONSON BATTLE CREEK HOSPITAL	0.0	0.0	0.1
SAINT MARYS HEALTH SERVICE	0.2	0.0	0.2
All Other Vendors	0.0	0.1	0.1
Community Total (ADC)	0.2	0.2	0.5



VISN 10: MichErie Market

Demand ► NVCC FY16-18 – Inpatient BDOC

Sector/ County Name			Medicine			Surgery			Mental Health		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-i-1-A	Cheboygan, MI	1,070	23	105	57	9	66	115	N/A	N/A	3
10-i-1-A	Crawford, MI	589	45	30	40	47	16	28	N/A	4	N/A
10-i-1-A	Emmet, MI	938	26	18	51	10	N/A	81	4	N/A	8
10-i-1-A	Montmorency, MI	618	16	33	28	29	37	21	N/A	N/A	N/A
10-i-1-A	Otsego, MI	994	36	112	38	68	33	34	5	15	35
	Sector Subtotal	4,209	146	298	214	163	152	279	9	19	46
10-i-1-B	Antrim, MI	734	56	13	54	3	23	43	N/A	3	16
10-i-1-B	Benzie, MI	595	43	31	31	6	34	38	N/A	N/A	6
10-i-1-B	Charlevoix, MI	860	32	39	28	6	10	18	N/A	N/A	N/A
10-i-1-B	Grand Traverse, MI	2,648	145	134	170	137	104	211	16	22	27
10-i-1-B	Kalkaska, MI	638	61	69	67	35	74	24	9	4	17
10-i-1-B	Leelanau, MI	476	11	53	15	13	53	25	N/A	N/A	N/A
	Sector Subtotal	5,951	348	339	365	200	298	359	25	29	66
10-i-1-C	Lake, MI	459	23	8	27	5	44	11	N/A	4	3
10-i-1-C	Manistee, MI	893	115	52	55	58	36	58	12	N/A	7
10-i-1-C	Mason, MI	855	28	61	57	19	11	23	N/A	N/A	N/A
10-i-1-C	Missaukee, MI	440	6	14	18	N/A	23	22	4	N/A	2
10-i-1-C	Osceola, MI	889	10	29	16	41	1	28	N/A	N/A	N/A
10-i-1-C	Wexford, MI	1,244	39	38	36	8	31	61	3	N/A	10
	Sector Subtotal	4,780	221	202	209	131	146	203	19	4	22
10-i-2-A	Muskegon, MI	4,695	119	142	82	43	70	106	10	8	4
10-i-2-A	Oceana, MI	855	57	29	14	29	67	7	N/A	N/A	N/A
	Sector Subtotal	5,550	176	171	96	72	137	113	10	8	4
10-i-2-B	Ionia, MI	1,219	28	28	47	15	2	40	N/A	N/A	N/A
10-i-2-B	Mecosta, MI	987	46	29	67	36	13	25	N/A	N/A	11
10-i-2-B	Montcalm, MI	1,649	80	76	120	65	33	50	N/A	11	N/A



VISN 10: MichErie Market

Demand ► NVCC FY16-18 – Inpatient BDOC, cont.

Sector/ County Name			Medicine			Surgery			Mental Health		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-i-2-B	Newaygo, MI	1,387	68	108	58	20	31	48	N/A	N/A	N/A
	Sector Subtotal	5,242	222	241	292	136	79	163	N/A	11	11
10-i-2-C	Allegan, MI	2,199	113	95	132	137	41	151	10	3	2
10-i-2-C	Ottawa, MI	4,591	145	45	150	50	43	71	N/A	1	10
	Sector Subtotal	6,790	258	140	282	187	84	222	10	4	12
10-i-2-D	Kent, MI	11,957	571	466	590	161	119	362	N/A	11	91
	Sector Subtotal	11,957	571	466	590	161	119	362	N/A	11	91
10-i-2-E	Clinton, MI	1,485	37	11	25	3	14	10	N/A	N/A	N/A
10-i-2-E	Eaton, MI	2,555	130	75	49	38	59	67	N/A	1	5
10-i-2-E	Gratiot, MI	1,124	57	56	38	33	2	49	N/A	7	4
10-i-2-E	Ingham, MI	4,556	177	173	105	23	26	85	9	7	12
	Sector Subtotal	9,720	401	315	217	97	101	211	9	15	21
10-i-2-F	Barry, MI	1,344	96	113	109	6	37	87	N/A	N/A	N/A
10-i-2-F	Branch, MI	1,206	130	121	65	54	148	27	N/A	N/A	N/A
10-i-2-F	Calhoun, MI	4,627	630	718	663	394	251	447	19	48	56
10-i-2-F	Kalamazoo, MI	4,769	343	334	462	211	143	161	10	N/A	8
10-i-2-F	Saint Joseph, MI	1,415	81	34	80	65	73	59	8	17	4
	Sector Subtotal	13,361	1,280	1,320	1,379	730	652	781	37	65	68
10-i-3-A	Hillsdale, MI	1,331	47	44	35	35	3	45	N/A	N/A	N/A
10-i-3-A	Jackson, MI	4,441	27	69	68	80	50	88	7	N/A	N/A
	Sector Subtotal	5,772	74	113	103	115	53	133	7	N/A	N/A
10-i-3-B	Lenawee, MI	2,949	30	48	82	38	36	37	6	N/A	1
10-i-3-B	Livingston, MI	3,249	50	52	53	65	45	55	5	N/A	5
10-i-3-B	Washtenaw, MI	5,473	119	81	73	97	69	71	21	21	49
	Sector Subtotal	11,671	199	181	208	200	150	163	32	21	55
10-i-3-C	Fulton, OH	1,173	41	24	6	41	3	27	14	1	N/A



VISN 10: MichErie Market

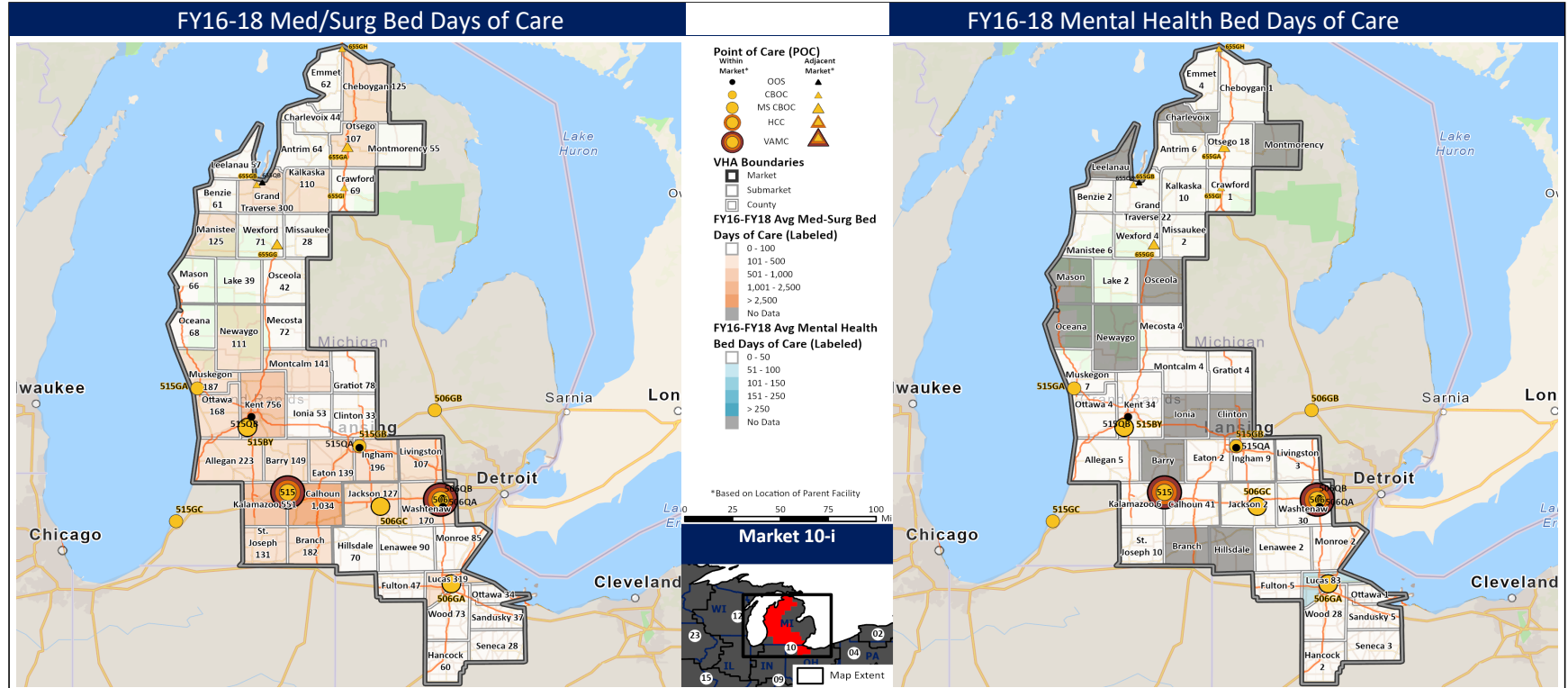
Demand ► NVCC FY16-18 – Inpatient BDOC, cont.

Sector/ County Name			Medicine			Surgery			Mental Health		
Sector	County Name	2017 Enrollees	FY16	FY17	FY18	FY16	FY17	FY18	FY16	FY17	FY18
10-i-3-C	Lucas, OH	9,251	196	98	204	185	134	140	141	85	23
10-i-3-C	Monroe, MI	3,696	44	48	23	75	12	54	N/A	1	4
10-i-3-C	Ottawa, OH	1,543	33	5	24	24	N/A	17	N/A	N/A	2
10-i-3-C	Wood, OH	2,493	72	36	42	34	30	4	38	13	33
	Sector Subtotal	18,156	386	211	299	359	179	242	193	100	62
10-i-3-E	Hancock, OH	1,568	63	18	11	45	18	26	2	3	N/A
10-i-3-E	Sandusky, OH	1,568	26	29	9	7	32	7	13	N/A	2
10-i-3-E	Seneca, OH	1,878	24	4	12	16	16	11	1	7	N/A
	Sector Subtotal	5,014	113	51	32	68	66	44	16	10	2
	Market Total	108,173	4,395	4,048	4,286	2,619	2,216	3,275	367	297	460



VISN 10: MichErie Market

Demand ► NVCC FY16-18 – Inpatient Utilization Patterns



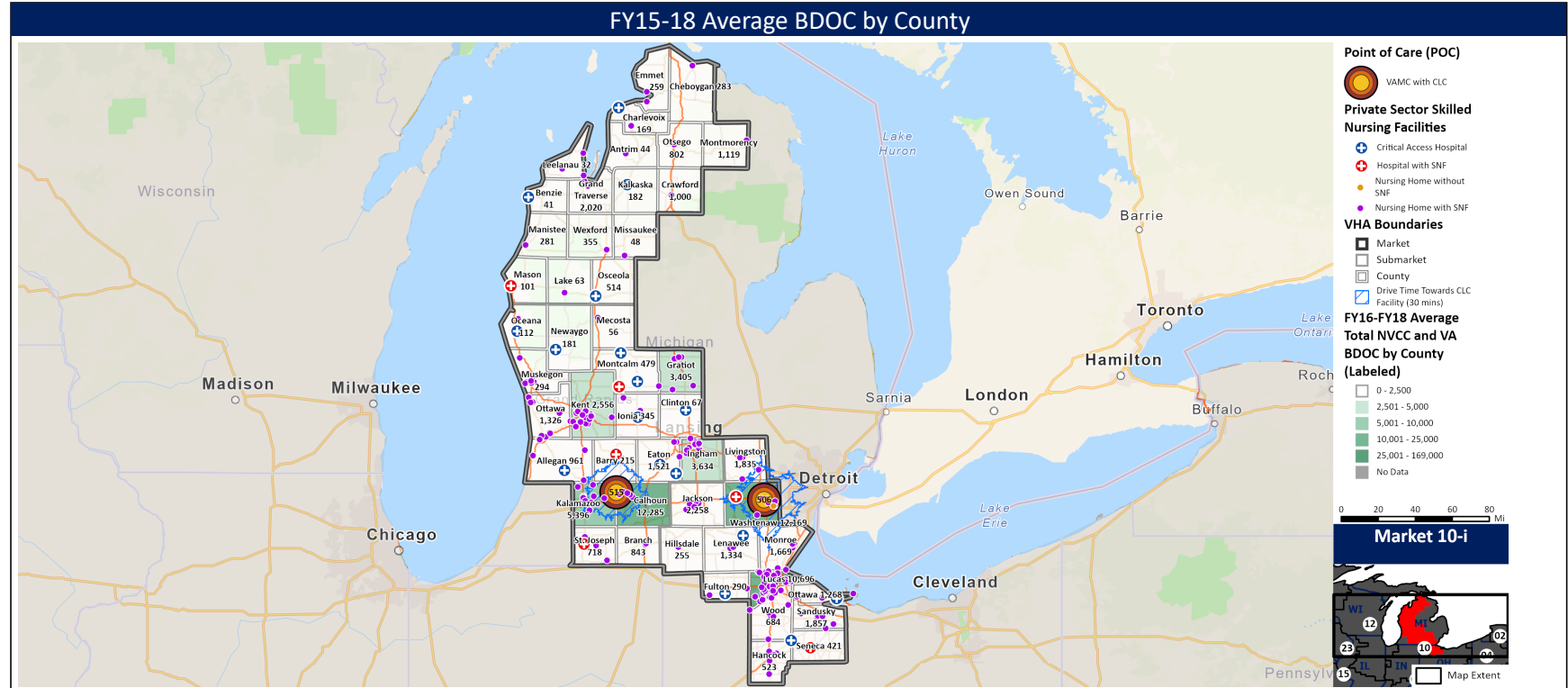
Source: VHA Office of Community Care

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VISN 10: MichErie Market

Demand ► Nursing Home BDOC Distribution



Note: Data is only for fee basis and does not encompass all Community Care

Source: 1. VSSC Treating Specialty Cube 2. VSSC NVCC Cube 3. Definitive HC

4.7.V10.MichErie#IMG



VISN 10: MichErie Market

Demand ► Nursing Home BDOC Distribution, cont.

County	FY18 Non-VA Community Care*	FY18 VA	FY18 Total BDOC
Allegan, MI	315	647	962
Antrim, MI	50	46	96
Barry, MI		222	222
Benzie, MI	32	21	53
Branch, MI	93	759	852
Calhoun, MI	1,558	11,892	13,450
Charlevoix, MI	119	51	170
Cheboygan, MI	297	50	347
Clinton, MI	9	131	140
Crawford, MI	796	78	874
Eaton, MI	216	1,507	1,723
Emmet, MI	477	30	507
Grand Traverse, MI	2,175	191	2,366
Gratiot, MI	2,996	117	3,113
Hillsdale, MI	86	247	333
Ingham, MI	2,740	2,379	5,119
Ionia, MI	73	476	549
Jackson, MI	1,489	1,218	2,707
Kalamazoo, MI	1,723	4,294	6,017
Kalkaska, MI	258	5	263

*Data is only for fee basis and does not encompass all Community Care

Source: 1. VSSC Treating Specialty Cube 2. VSSC NVCC Cube 3. Definitive HC

4.7.V10.MichErie



VISN 10: MichErie Market

Demand ► Nursing Home BDOC Distribution, cont.

County	FY18 Non-VA Community Care*	FY18 VA	FY18 Total BDOC
Kent, MI	2,227	1,482	3,709
Lake, MI	1	82	83
Leelanau, MI	10	9	19
Lenawee, MI	1,532	427	1,959
Livingston, MI	389	791	1,180
Manistee, MI	190	104	294
Mason, MI	81	90	171
Mecosta, MI	54		54
Missaukee, MI	98	12	110
Monroe, MI	1,156	629	1,785
Montcalm, MI	451	34	485
Montmorency, MI	735	75	810
Muskegon, MI	62	349	411
Newaygo, MI		299	299
Oceana, MI		38	38
Osceola, MI	686	59	745
Otsego, MI	779	50	829
Ottawa, MI	2,680	114	2,794
Saint Joseph, MI		651	651
Washtenaw, MI	12,084	2,225	14,309

*Data is only for fee basis and does not encompass all Community Care

Source: 1. VSSC Treating Specialty Cube 2. VSSC NVCC Cube 3. Definitive HC

4.7.V10.MichErie#2



VISN 10: MichErie Market

Demand ► Nursing Home BDOC Distribution, cont.

County	FY18 Non-VA Community Care*	FY18 VA	FY18 Total BDOC
Wexford, MI	397	166	563
Fulton, OH			0
Hancock, OH	114	483	597
Lucas, OH	11,121	1,216	12,337
Ottawa, OH	1,065		1,065
Sandusky, OH	2,008	152	2,160
Seneca, OH	451	126	577
Wood, OH	79	198	277
Total	53,952	34,223	88,175

*Data is only for fee basis and does not encompass all Community Care

Source: 1. VSSC Treating Specialty Cube 2. VSSC NVCC Cube 3. Definitive HC

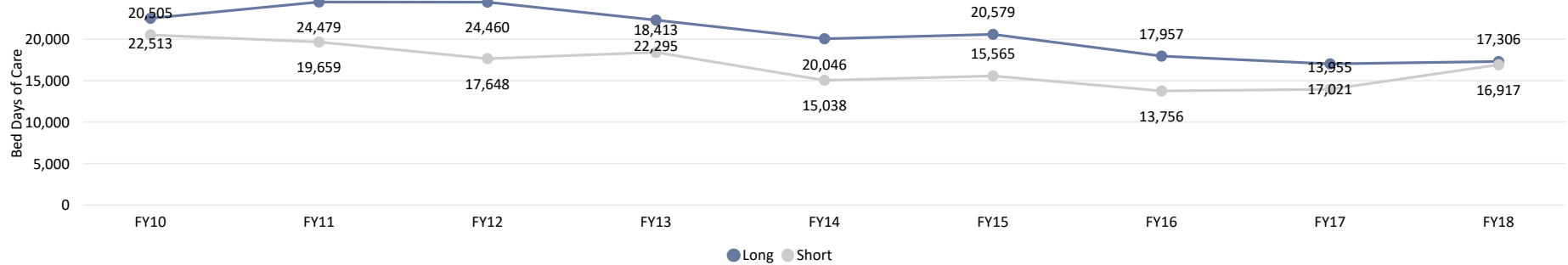
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VISN 10: MichErie Market

Demand ► In-House LTSS Short Stays vs. Long Stays BDOC

FY10-18 Long Stay BDOC vs. Short Stay BDOC



FY10-18 Long Stay BDOC vs. Short Stay BDOC

Stay	Age	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	% Change
Long	< 40	0	638	0	0	111	0	0	0	0	0.0%
	40-54	889	644	835	1,240	1,625	2,421	1,087	1,633	759	-14.7%
	55-64	4,422	4,995	4,511	2,215	2,370	1,945	1,772	1,285	1,643	-62.9%
	65-79	5,736	5,748	7,419	8,581	9,187	8,289	8,792	8,201	9,397	63.8%
	80+	11,466	12,454	11,695	10,259	6,753	7,924	6,306	5,903	5,507	-52.0%
Total Long		22,513	24,479	24,460	22,295	20,046	20,579	17,957	17,021	17,306	-23.1%
Short	< 40	116	18	5	54	89	33	27	80	57	-50.9%
	40-54	1,716	2,038	810	749	775	786	972	607	667	-61.1%
	55-64	8,506	6,758	5,300	5,587	4,160	3,384	2,876	3,143	2,508	-70.5%
	65-79	5,814	5,036	6,291	6,912	6,342	7,265	6,452	7,251	9,239	58.9%
	80+	4,310	5,778	5,235	5,095	3,672	4,085	3,354	2,717	4,266	-1.0%
Total Short		20,505	19,659	17,648	18,413	15,038	15,565	13,756	13,955	16,917	-17.5%



VISN 10: MichErie Market

Demand ► Community Nursing Home vs. In-House BDOC

VA (In-House)				
Facility	Operating Beds Reported in the PTF Cube	Operating Beds Reported by the Field	FY18 ADC	NVCC, FY18 ADC**
(V10) (506) Ann Arbor-Michigan	46	40	39.0	92.8
(V10) (515) Battle Creek	109	75	71.0	32.8
Total	155	115	110.0	125.6

Community Statistics***				
Facility	Operating Beds	FY18 ADC	Occupancy	Potential Available Beds*
(V10) (506) Ann Arbor-Michigan	9,723	8,021.0	82.3%	1,216
(V10) (515) Battle Creek	1,220	964.0	81.7%	195

*Potential Available Beds is defined as Operating Beds less ADC based on a 95% occupancy

**Data is only for fee basis and does not encompass all Community Care

***SNFs within a 30 minute drive time of facility. Does not include SNFs in which the ADC overly exceeded operating beds (>30%) as it indicates a coding issue

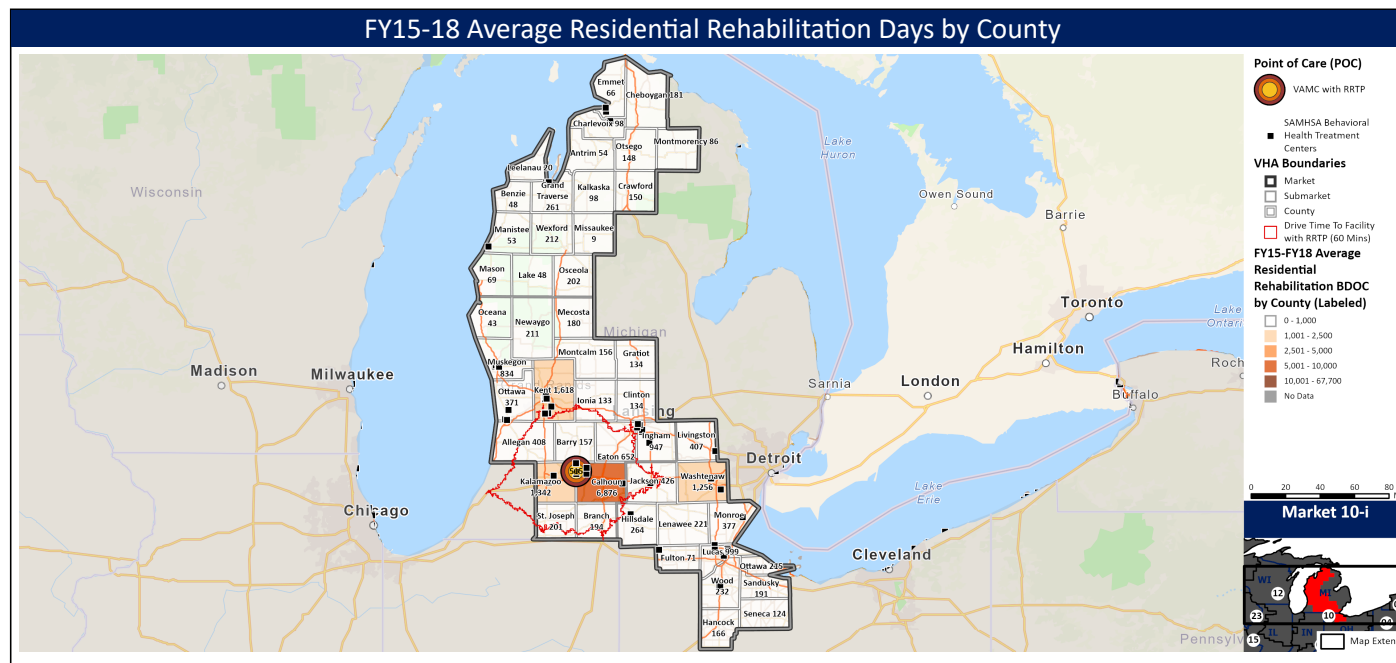
Source: 1. VSSC Beds Using PTF Cube 2. VSSC NVCC Cube 3. Definitive Healthcare

4.9.V10.MichErie



VISN 10: MichErie Market

Demand ► Residential Rehab BDOC





VISN 10: MichErie Market

Demand ► Residential Rehab BDOC, cont.

Care Received in a VAMC/VA Facility (not limited to VA Facilities in the market)				
Top 10 Market Counties	FY15 BDOC	FY16 BDOC	FY17 BDOC	FY18 BDOC
Calhoun, MI	6,464	6,448	7,105	7,489
Kent, MI	1,701	1,934	1,189	1,648
Lucas, OH	1,143	1,039	648	1,166
Kalamazoo, MI	2,123	1,235	850	1,161
Washtenaw, MI	1,377	991	1,647	1,011
Ingham, MI	684	1,136	1,186	784
Muskegon, MI	897	865	874	699
Eaton, MI	384	682	900	641
Wood, OH	59	268	223	380
Grand Traverse, MI	292	223	155	376



VISN 10: MichErie Market – Ann Arbor-Michigan

Demand ► Surgical Cases FY15-18 – Ann Arbor-Michigan

Facility	Setting	Specialty	FY15	FY16	FY17	FY18	FY15-18 % Chg
(V10) (506) Ann Arbor-Michigan	Inpatient	CARDIAC SURGERY	198	92	182	152	-23.2%
		EAR, NOSE, THROAT (ENT)	61	41	37	47	-23.0%
		GENERAL SURGERY	283	283	255	260	-8.1%
		NEUROSURGERY	69	54	70	42	-39.1%
		OB/GYN	2	1	N/A	N/A	-100.0%
		OPHTHALMOLOGY	6	2	6	3	-50.0%
		ORAL SURGERY	6	3	2	2	-66.7%
		ORTHOPEDICS	111	83	101	123	10.8%
		PERIPHERAL VASCULAR	308	202	238	203	-34.1%
		PLASTIC SURGERY	36	47	43	30	-16.7%
		THORACIC SURGERY	46	37	50	40	-13.0%
		UROLOGY	194	133	159	106	-45.4%
		Inpatient Total	1,320	978	1,143	1,008	-23.6%
	Outpatient	CARDIAC SURGERY	5	6	6	7	40.0%
		EAR, NOSE, THROAT (ENT)	486	355	503	406	-16.5%
		GENERAL SURGERY	430	409	469	366	-14.9%
		NEUROSURGERY	89	108	148	121	36.0%
		OB/GYN	36	39	47	50	38.9%
		OPHTHALMOLOGY	1,297	1,053	1,435	1,196	-7.8%
		ORAL SURGERY	20	17	16	15	-25.0%
		ORTHOPEDICS	146	140	140	167	14.4%
		PERIPHERAL VASCULAR	45	47	43	59	31.1%



VISN 10: MichErie Market – Ann Arbor-Michigan

Demand ► Surgical Cases FY15-18 – Ann Arbor-Michigan, cont.

Facility	Setting	Specialty	FY15	FY16	FY17	FY18	FY15-18 % Chg
(V10) (506) Ann Arbor-Michigan	Outpatient	PLASTIC SURGERY	175	194	203	179	2.3%
		THORACIC SURGERY	20	9	34	17	-15.0%
		UROLOGY	647	439	531	555	-14.2%
		Outpatient Total	3,396	2,816	3,575	3,138	-7.6%
Facility Total	Total		4,716	3,794	4,718	4,146	-12.1%



Demand ► Estimated Future Market Demand — Inpatient

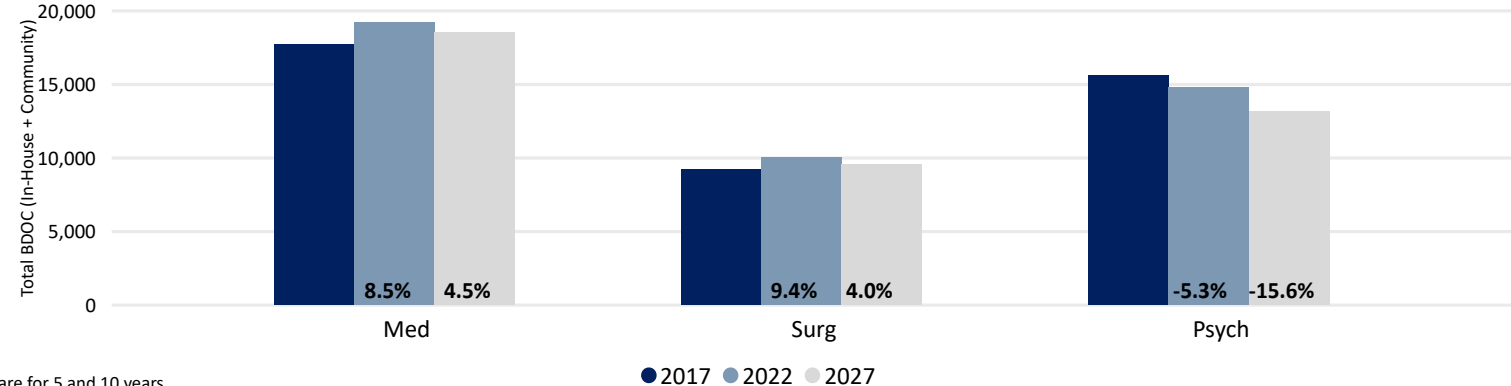


VISN 10: MichErie Market

Demand ► **BY17 Market Utilization Projections (Acute Inpatient) — MichErie Market**

BY17 VISN 10 MichErie Market Utilization Projections BDOC									
	FY17			FY22			FY27		
	Med	Surg	Psych	Med	Surg	Psych	Med	Surg	Psych
In-House BDOC	11,411	5,448	14,864	12,332	5,975	14,084	11,803	5,688	12,558
Community BDOC	6,303	3,750	730	6,882	4,085	687	6,716	3,874	600
Total BDOC	17,714	9,198	15,594	19,214	10,059	14,771	18,519	9,561	13,158
ADC By HSPG	49.0	25.2	43.0	53.0	27.6	40.0	51.0	26.2	36.0
Total ADC	116.5	116.5	116.5	120.7	120.7	120.7	113.0	113.0	113.0
Total Bed Need*	137	137	137	142	142	142	133	133	133

*Total Bed Need is based on a 85% occupancy rate



Note: Percent changes are for 5 and 10 years

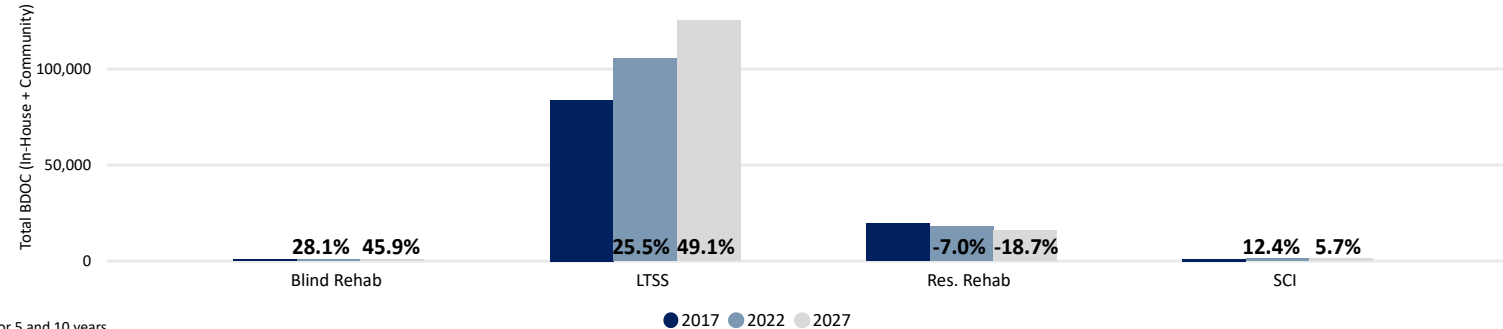


VISN 10: MichErie Market

Demand ► **BY17 Market Utilization Projections (Other Inpatient) — MichErie Market**

BY17 VISN 10 MichErie Market Utilization Projections BDOC												
	FY17				FY22				FY27			
	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI
ADC By HSPG	1.3	229.8	53.3	3.2	1.7	288.5	49.6	3.6	1.9	342.7	43.4	3.3
Total BDOC	477	83,895	19,459	1,154	611	105,300	18,089	1,297	696	125,079	15,828	1,220
Community BDOC	0	49,221	0	0	0	69,286	0	0	0	87,774	0	0
In-House BDOC	477	34,674	19,459	1,154	611	36,014	18,089	1,297	696	37,305	15,828	1,220
Total ADC	287.6				343.3				391.3			
Total Bed Need*	309				367				417			

*Total Bed Need is based on a 95% occupancy for LTSS and 85% occupancy for blind rehab, residential rehab, and SCI



Note: Percent changes are for 5 and 10 years

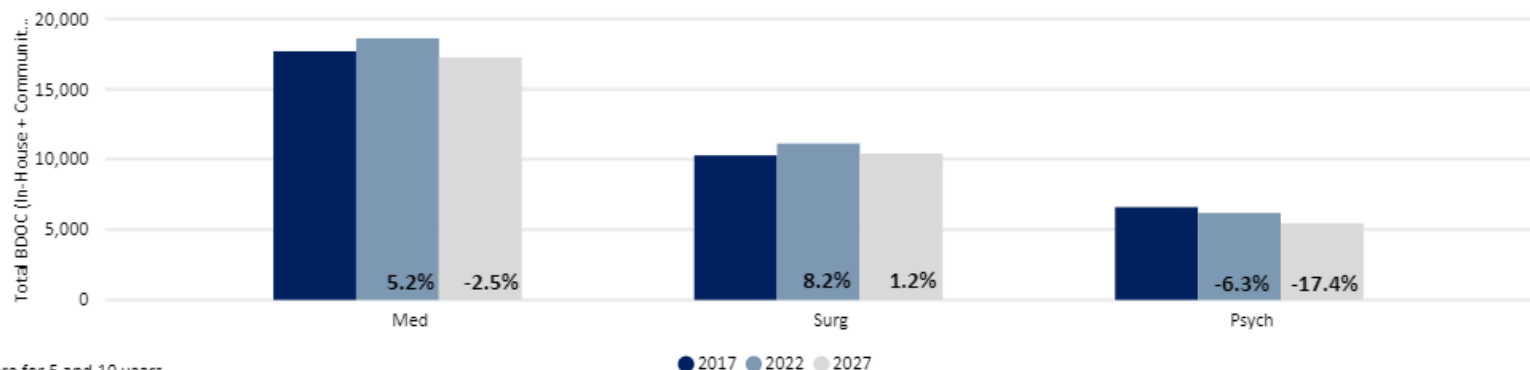


VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► **BY17 Parent Facility Utilization Projections (Acute Inpatient) — Ann Arbor-Michigan VAMC**

BY17 Ann Arbor-Michigan VAMC Utilization Projections BDOC									
	FY17			FY22			FY27		
	Med	Surg	Psych	Med	Surg	Psych	Med	Surg	Psych
In-House BDOC	16,150	8,962	6,296	16,979	9,679	5,894	15,729	9,049	5,200
Community BDOC	1,539	1,320	302	1,630	1,446	286	1,523	1,354	254
Total BDOC	17,689	10,282	6,598	18,610	11,125	6,180	17,252	10,404	5,453
ADC By HSPG	48.5	28.2	18.1	51.0	30.5	16.9	47.3	28.5	14.9
Total ADC	94.7			98.4			90.7		
Total Bed Need*	111			116			107		

*Total bed need is based on an 85% occupancy rate



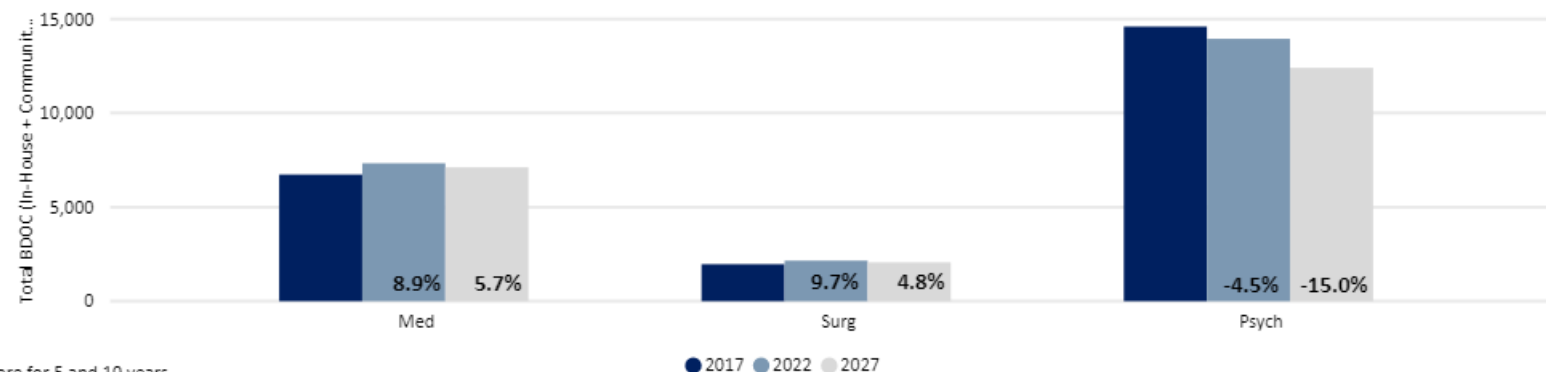


VISN 10: MichErie Market — Battle Creek

Demand ► **BY17 Parent Facility Utilization Projections (Acute Inpatient) — Battle Creek VAMC**

BY17 Battle Creek VAMC Utilization Projections BDOC									
	FY17			FY22			FY27		
	Med	Surg	Psych	Med	Surg	Psych	Med	Surg	Psych
In-House BDOC	2,150		14,348	2,338		13,721	2,266		12,213
Community BDOC	4,580	1,966	245	4,991	2,156	220	4,846	2,060	184
Total BDOC	6,730	1,966	14,593	7,330	2,156	13,942	7,112	2,060	12,397
ADC By HSPG	18.4	5.4	40.0	20.1	5.9	38.2	19.5	5.6	34.0
Total ADC	63.8			64.2			59.1		
Total Bed Need*	75			76			70		

*Total bed need is based on an 85% occupancy rate



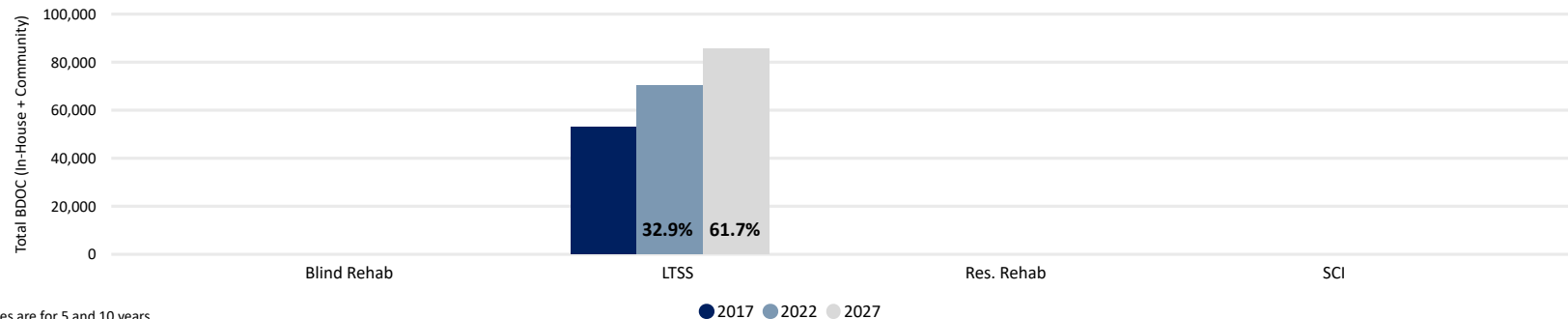


VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► BY17 Parent Facility Utilization Projections (Other Inpatient) — Ann Arbor-Michigan VAMC

BY17 Ann Arbor-Michigan VAMC Utilization Projections BDOC												
	FY17				FY22				FY27			
	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI
In-House BDOC	N/A	13,849	N/A	N/A	N/A	14,532	N/A	N/A	N/A	14,754	N/A	N/A
Community BDOC	N/A	38,976	N/A	N/A	N/A	55,648	N/A	N/A	N/A	70,690	N/A	N/A
Total BDOC	N/A	52,825	N/A	N/A	N/A	70,180	N/A	N/A	N/A	85,444	N/A	N/A
ADC By HSPG	N/A	144.7	0.0	N/A	N/A	192.3	N/A	N/A	N/A	234.1	N/A	N/A
Total ADC	144.7				192.3				234.1			
Total Bed Need*	152				202				246			

*Total bed need is based on a 95% occupancy for LTSS and 85% occupancy for Blind rehab, residential rehab, and SCI



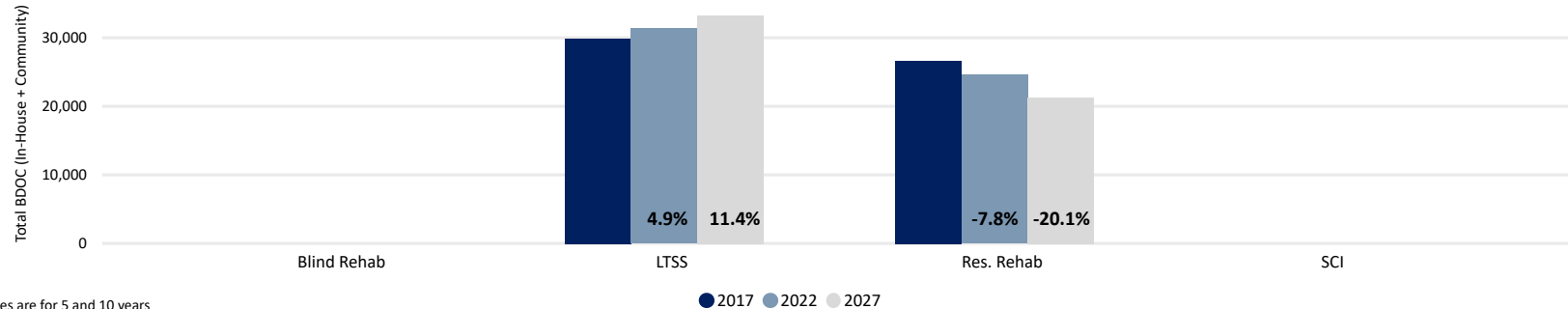


VISN 10: MichErie Market — Battle Creek

Demand ► **BY17 Parent Facility Utilization Projections (Other Inpatient) — Battle Creek VAMC**

BY17 Battle Creek VAMC Utilization Projections BDOC												
	FY17				FY22				FY27			
	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI	Blind Rehab	LTSS	Res Rehab	SCI
In-House BDOC	N/A	26,738	26,641	N/A	N/A	27,186	24,551	N/A	N/A	28,249	21,281	N/A
Community BDOC	N/A	3,126	N/A	N/A	N/A	4,136	N/A	N/A	N/A	5,005	N/A	N/A
Total BDOC	N/A	29,864	26,641	N/A	N/A	31,322	24,551	N/A	N/A	33,254	21,281	N/A
ADC By HSPG	N/A	81.8	73.0	N/A	N/A	85.8	67.3	N/A	N/A	91.1	58.3	N/A
Total ADC	154.8				153.1				149.4			
Total Bed Need*	172				169				164			

*Total bed need is based on a 95% occupancy for LTSS and 85% occupancy for Blind rehab, residential rehab, and SCI





VISN 10: MichErie Market — Ann Arbor-Michigan

Demand ► Overall Inpatient Commercial Demand – Ann Arbor-Michigan Area

• Overview:

- ✓ Commercial market inpatient demand estimates were developed to understand current and future expected inpatient demand trends for non-Veteran populations
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Total Inpatient Bed Days of Care (BDOC)				Growth Projections (#,%)		
	2018	2023	2028	5 Year Chg	5 Year % Chg	10 Year Chg	10 Year % Chg
General Medicine	326,089	375,687	418,700	49,598	15.2%	92,611	28.4%
Nephrology	142,907	157,539	170,446	14,632	10.2%	27,539	19.3%
Hematology	37,147	38,146	38,812	999	2.7%	1,665	4.5%
Neurology	220,734	235,450	247,529	14,716	6.7%	26,795	12.1%
Rheumatology	9,129	8,862	8,403	-267	-2.9%	-726	-8.0%
Gastroenterology	221,144	220,806	226,786	-338	-0.2%	5,642	2.6%
Oncology Medical	79,383	78,462	78,218	-921	-1.2%	-1,165	-1.5%
Pulmonary	288,091	281,031	269,521	-7,060	-2.5%	-18,570	-6.4%
Dermatology	48,220	47,063	48,639	-1,157	-2.4%	419	0.9%
Cardiology	379,099	356,442	328,935	-22,657	-6.0%	-50,164	-13.2%
HIV	3,019	2,699	2,515	-320	-10.6%	-504	-16.7%
Endocrine	58,720	45,476	41,058	-13,244	-22.6%	-17,662	-30.1%
Medicine Sub-Total	1,813,682	1,847,663	1,879,562	33,981	1.9%	65,880	3.6%
Neurosurgery	38,220	38,501	38,567	281	0.7%	347	0.9%
Orthopedics	289,799	273,533	251,104	-16,266	-5.6%	-38,695	-13.4%
Open Heart	67,950	68,558	69,475	608	0.9%	1,525	2.2%
Ophthalmology	2,572	2,482	2,455	-90	-3.5%	-117	-4.5%
Vascular Surgery	39,649	38,249	37,224	-1,400	-3.5%	-2,425	-6.1%
General Surgery	308,090	308,762	314,128	672	0.2%	6,038	2.0%
Thoracic Surgery	95,117	93,288	91,078	-1,829	-1.9%	-4,039	-4.2%
Trauma	17,422	16,683	15,837	-739	-4.2%	-1,585	-9.1%
Dentistry	2,094	1,899	1,685	-195	-9.3%	-409	-19.5%
Urology	34,607	32,677	33,064	-1,930	-5.6%	-1,543	-4.5%
Otolaryngology	11,886	8,739	7,263	-3,147	-26.5%	-4,623	-38.9%
Surgery Sub-Total	907,406	883,371	861,880	-24,035	-2.6%	-45,526	-5.0%
Medicine/Surgery Total	2,721,088	2,731,034	2,741,442	9,946	0.4%	20,354	0.7%
OB/Delivery	151,455	139,656	131,396	-11,799	-7.8%	-20,059	-13.2%
Other OB	12,155	10,832	10,060	-1,323	-10.9%	-2,095	-17.2%
Gynecology	12,068	8,057	6,716	-4,011	-33.2%	-5,352	-44.3%
Women's Health Total	175,678	158,545	148,172	-17,133	-9.8%	-27,506	-15.7%
Psych/Drug Abuse	254,382	274,796	295,120	20,414	8.0%	40,738	16.0%
Mental Health Total	254,382	274,796	295,120	20,414	8.0%	40,738	16.0%
Acute Rehab	5,425	3,855	2,767	-1,570	-28.9%	-2,658	-49.0%
Rehab Total	5,425	3,855	2,767	-1,570	-28.9%	-2,658	-49.0%
Other Total	180	176	174	-4	-2.2%	-6	-3.3%
Grand Total	3,156,753	3,168,406	3,187,675	11,653	0.4%	30,922	1.0%



VISN 10: MichErie Market — Battle Creek

Demand ► Overall Inpatient Commercial Demand – Battle Creek Area

• Overview:

- ✓ Commercial market inpatient demand estimates were developed to understand current and future expected inpatient demand trends for non-Veteran populations
- ✓ Demand estimates are based on non-Veteran patient origin within a 60 minute drive time from parent VA Medical Center/ Health Care Center noted

Clinical Service Line	Total Inpatient Bed Days of Care (BDOC)				Growth Projections (#,%)		
	2018	2023	2028	5 Year Chg	5 Year % Chg	10 Year Chg	10 Year % Chg
General Medicine	52,961	61,219	68,610	8,258	15.6%	15,649	29.5%
Nephrology	22,143	24,574	26,810	2,431	11.0%	4,667	21.1%
Rheumatology	1,439	1,408	1,348	-31	-2.2%	-91	-6.3%
Hematology	5,303	5,480	5,628	177	3.3%	325	6.1%
Neurology	34,830	37,363	39,569	2,533	7.3%	4,739	13.6%
Gastroenterology	35,398	35,515	36,701	117	0.3%	1,303	3.7%
Dermatology	7,831	7,702	8,013	-129	-1.6%	182	2.3%
Oncology Medical	12,457	12,398	12,459	-59	-0.5%	2	0.0%
Pulmonary	45,689	44,758	43,189	-931	-2.0%	-2,500	-5.5%
Cardiology	59,536	56,308	52,362	-3,228	-5.4%	-7,174	-12.0%
HIV	252	234	225	-18	-7.1%	-27	-10.7%
Endocrine	9,159	7,136	6,514	-2,023	-22.1%	-2,645	-28.9%
Medicine Sub-Total	286,998	294,095	301,428	7,097	2.5%	14,430	5.0%
Neurosurgery	6,148	6,214	6,259	66	1.1%	111	1.8%
Orthopedics	47,705	44,852	41,126	-2,853	-6.0%	-6,579	-13.8%
Open Heart	11,183	11,234	11,391	51	0.5%	208	1.9%
Ophthalmology	393	382	382	-11	-2.8%	-11	-2.8%
General Surgery	49,647	49,913	51,043	266	0.5%	1,396	2.8%
Vascular Surgery	6,092	5,917	5,808	-175	-2.9%	-284	-4.7%
Thoracic Surgery	14,765	14,567	14,327	-198	-1.3%	-438	-3.0%
Trauma	2,885	2,781	2,659	-104	-3.6%	-226	-7.8%
Dentistry	312	288	259	-24	-7.7%	-53	-17.0%
Urology	5,541	5,231	5,317	-310	-5.6%	-224	-4.0%
Otolaryngology	1,850	1,383	1,165	-467	-25.2%	-685	-37.0%
Surgery Sub-Total	146,521	142,762	139,736	-3,759	-2.6%	-6,785	-4.6%
Medicine/Surgery Total	433,519	436,857	441,164	3,338	0.8%	7,645	1.8%
OB/Delivery	27,228	26,133	25,582	-1,095	-4.0%	-1,646	-6.0%
Other OB	1,933	1,800	1,738	-133	-6.9%	-195	-10.1%
Gynecology	1,826	1,238	1,048	-588	-32.2%	-778	-42.6%
Women's Health Total	30,987	29,171	28,368	-1,816	-5.9%	-2,619	-8.5%
Psych/Drug Abuse	40,885	44,922	49,047	4,037	9.9%	8,162	20.0%
Mental Health Total	40,885	44,922	49,047	4,037	9.9%	8,162	20.0%
Acute Rehab	1,057	779	579	-278	-26.3%	-478	-45.2%
Rehab Total	1,057	779	579	-278	-26.3%	-478	-45.2%
Other Total	33	33	33	0	0.0%	0	0.0%
Grand Total	506,481	511,762	519,191	5,281	1.0%	12,710	2.5%



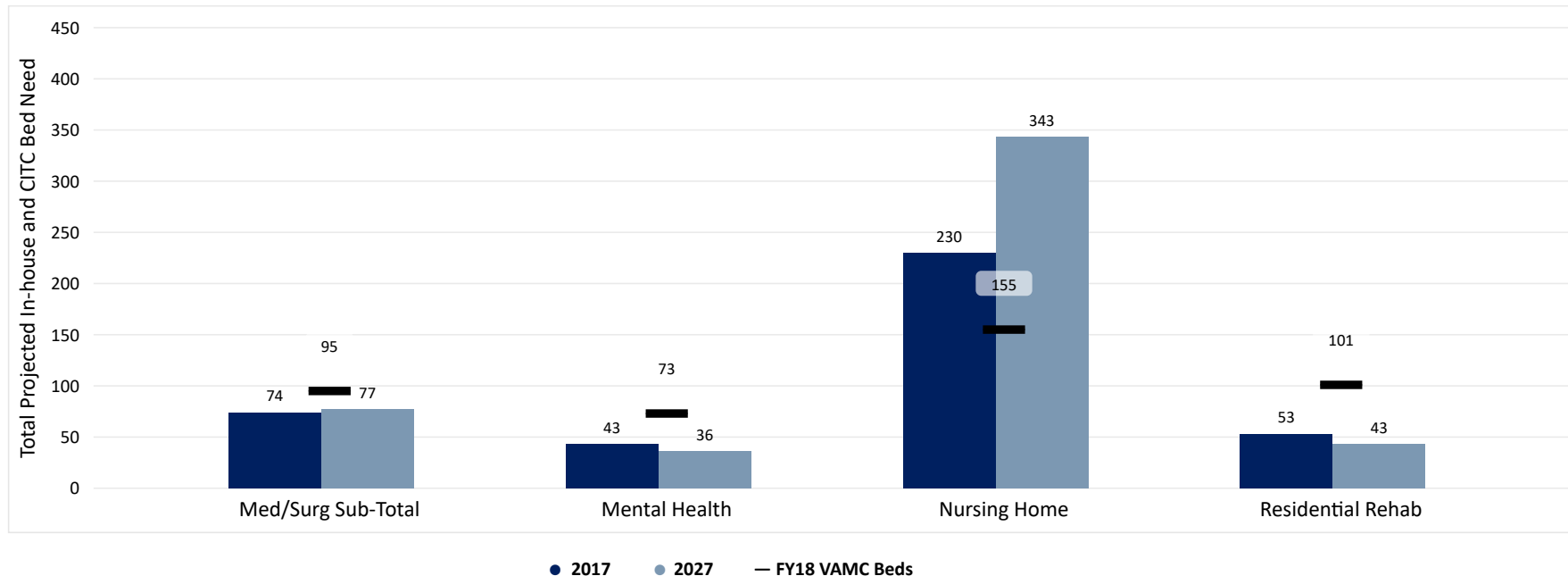
Supply ► **Estimated Current Total VA Market Supply**



VISN 10: MichErie Market

Supply ► Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Inpatient Services

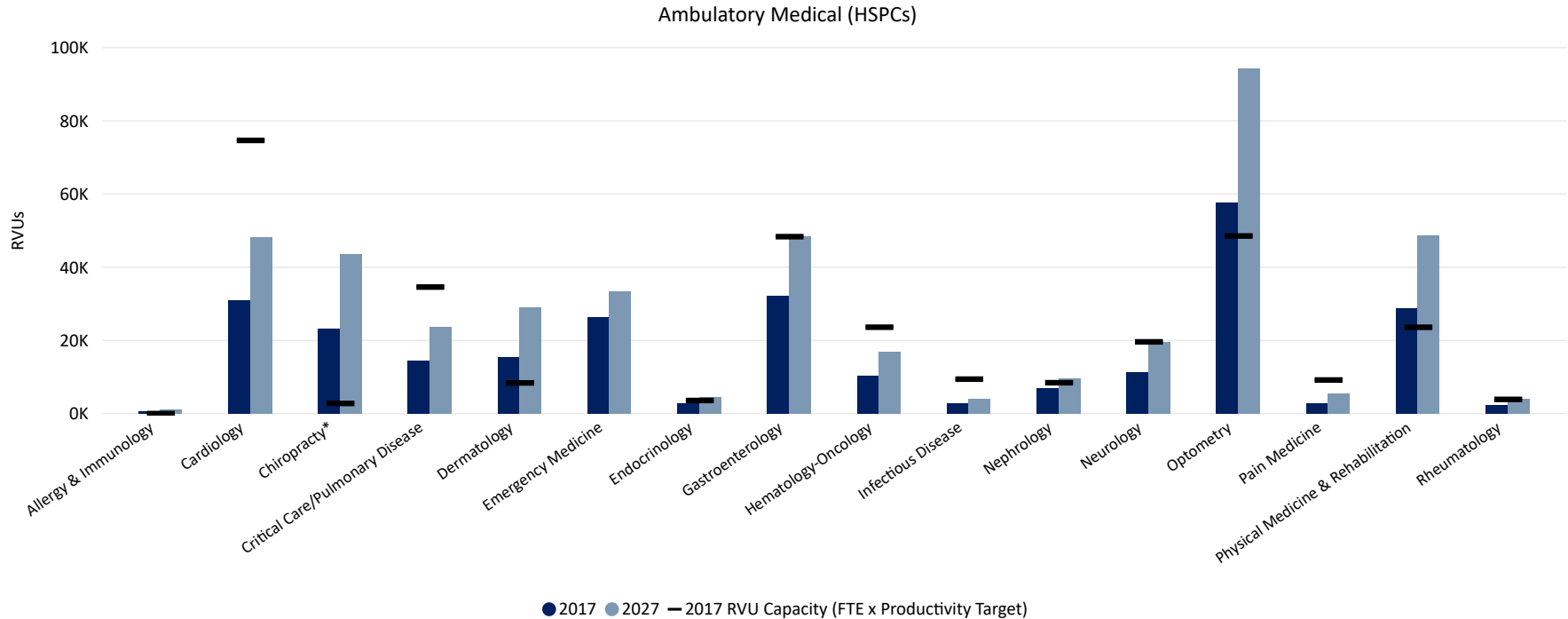
Veteran Inpatient Projected Demand and VA Supply





VISN 10: MichErie Market

Supply ▶ Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Outpatient Services — Ambulatory Medical Specialties (HSPCs)



* Reflects service is not provided in-house or there is no VA set productivity target

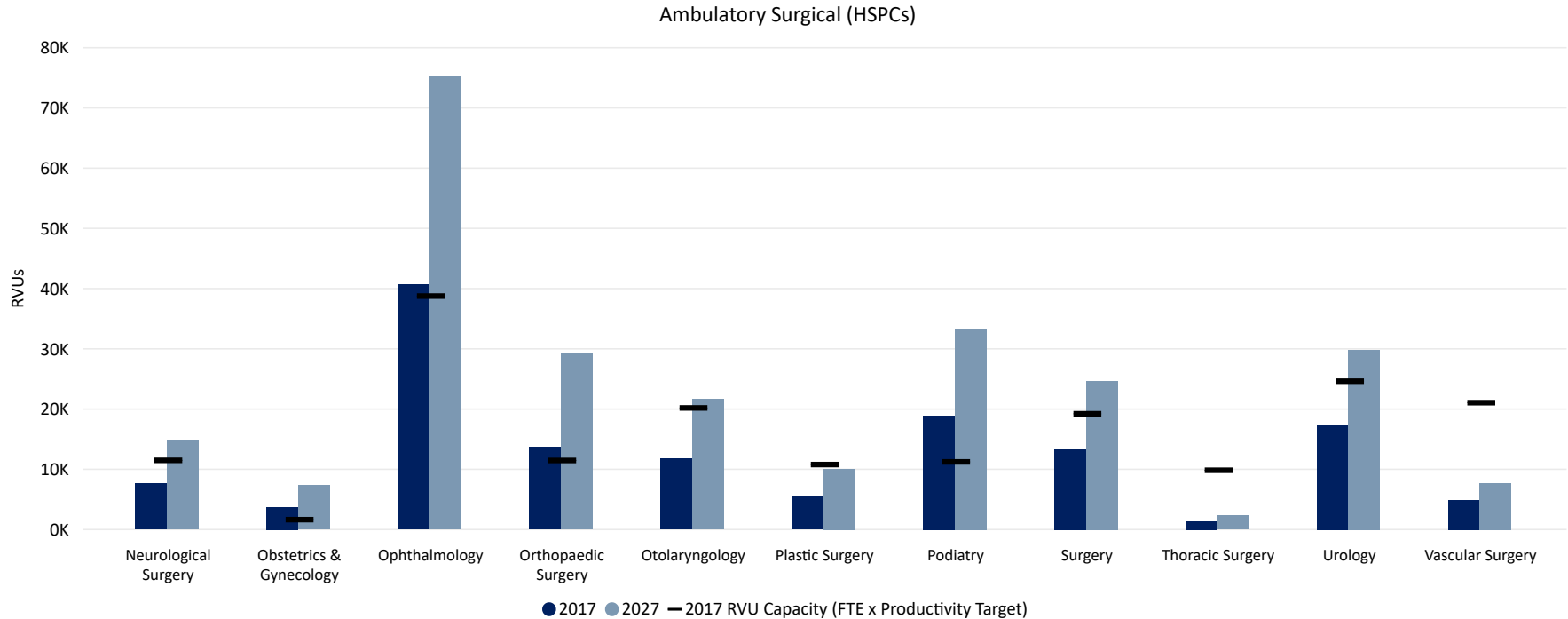
Source: 1. BY17 EHCPM Utilization Projections 2. OPES Physician Capacity Reports 3. VSSC Physician Productivity Cube 4. VSSC MPCR3 Cube

6.2.V10.MichErie



VISN 10: MichErie Market

Supply ▶ Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Outpatient Services — Ambulatory Surgical Specialties (HSPCs)



* Reflects service is not provided in-house or there is no VA set productivity target

Source: 1. BY17 EHCPM Utilization Projections 2. OPES Physician Capacity Reports 3. VSSC Physician Productivity Cube 4. VSSC MPCR3 Cube

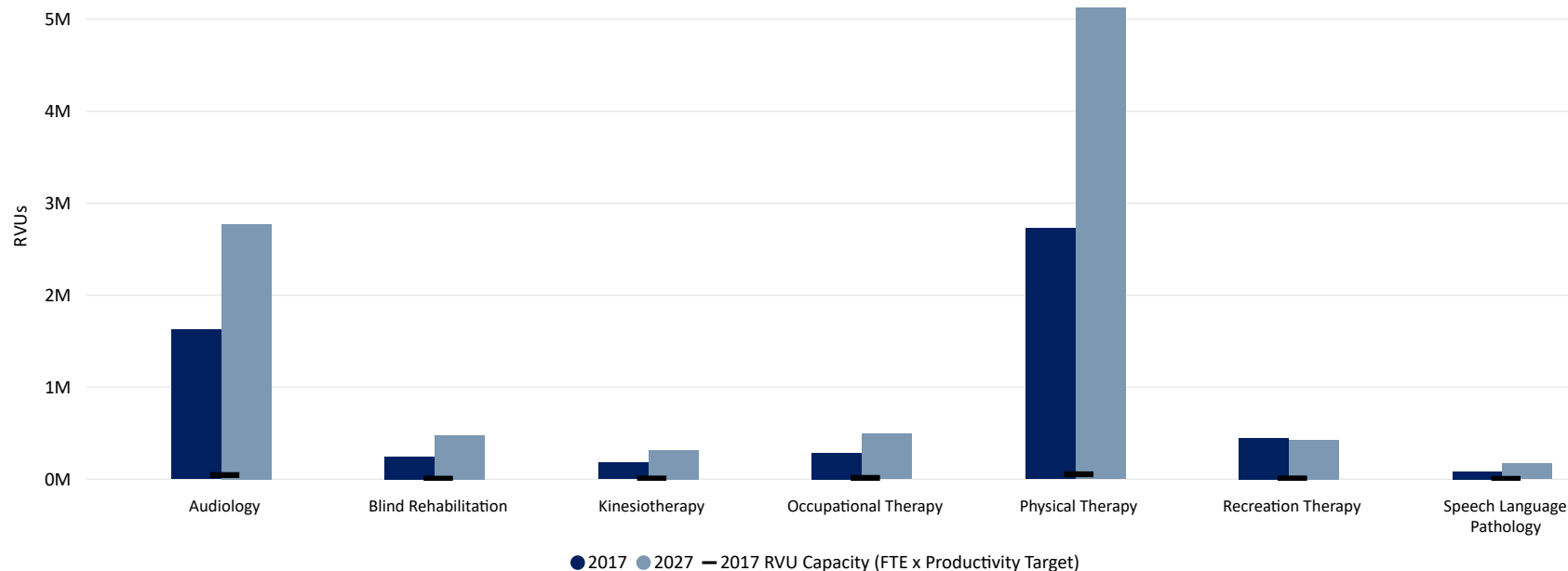
6.3.V10.MichErie



VISN 10: MichErie Market

Supply ► Comparing Total Market Veteran Demand vs. VA Medical Center Supply — Outpatient Services — Ambulatory Rehab Specialties (HSPCs)

Ambulatory Rehab (HSPCs)



* Reflects service is not provided in-house or there is no VA set productivity target

Source: 1. BY17 EHCPM Utilization Projections 2. OPES Physician Capacity Reports 3. VSSC Rehab Productivity Cube 4. VSSC MPCR3 Cube

6.4.V10.MichErie



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Physician Efficiency — Ann Arbor-Michigan VAMC

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Allergy and Immunology	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Anesthesiology	N/A	N/A	N/A	4.0	9.0	10.3	7.9	12.9	13.4
Cardiology	N/A	2 - Under Resourced	2 - Under Resourced	4.3	4.2	3.8	24.2	21.7	21.3
Critical Care / Pulmonary Disease	3 - Inefficient	2 - Under Resourced	N/A	4.4	4.6	4.3	2.4	3.9	3.7
Dermatology	2 - Under Resourced	1 - Optimized Practice	N/A	0.8	1.1	2.0	0.1	0.2	0.2
Emergency Medicine	N/A	N/A	N/A	5.0	4.9	4.7	0.5	0.5	0.5
Endocrinology	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	0.9	0.9	0.6	0.0	0.0	0.0
Gastroenterology	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	5.7	5.0	4.5	2.8	4.3	4.6
Geriatric Medicine	N/A	N/A	N/A	1.5	0.8	0.3	2.2	7.0	9.1
Hematology-Oncology	2 - Under Resourced	1 - Optimized Practice	1 - Optimized Practice	3.0	3.0	3.3	7.1	6.0	7.0
Infectious Disease	1 - Optimized Practice	2 - Under Resourced	2 - Under Resourced	1.5	1.6	1.5	0.0	0.0	0.0
Internal Medicine	N/A	2 - Under Resourced	2 - Under Resourced	48.3	51.1	45.0	11.2	10.8	9.8
Nephrology	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	1.3	1.8	1.7	0.0	0.0	0.0
Neurological Surgery	3 - Inefficient	2 - Under Resourced	3 - Inefficient	1.5	1.1	1.3	2.9	2.9	2.9
Neurology	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	1.9	3.4	3.4	0.3	0.3	0.0
Obstetrics & Gynecology	1 - Optimized Practice	2 - Under Resourced	1 - Optimized Practice	0.6	0.6	0.6	0.0	0.0	0.0
Ophthalmology	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	4.3	4.0	4.0	2.9	2.9	2.7
Optometry	2 - Under Resourced	3 - Inefficient	3 - Inefficient	3.5	3.6	3.8	0.1	0.1	0.1
Orthopaedic Surgery	3 - Inefficient	3 - Inefficient	1 - Optimized Practice	1.3	1.3	1.3	2.6	2.6	2.7
Otolaryngology	3 - Inefficient	2 - Under Resourced	2 - Under Resourced	1.8	1.6	1.9	8.0	5.9	5.9



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Physician Efficiency — Ann Arbor-Michigan VAMC, cont.

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Pain Medicine	N/A	N/A	N/A	N/A	N/A	N/A	1.5	1.4	N/A
Pathology	N/A	N/A	N/A	3.4	3.7	3.3	N/A	N/A	N/A
Physical Medicine & Rehabilitation	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	4.1	3.8	4.0	2.4	2.2	0.8
Plastic Surgery	3 - Inefficient	N/A	N/A	1.7	1.2	0.4	2.9	3.0	3.0
Podiatry	N/A	N/A	3 - Inefficient	0.2	0.2	0.2	N/A	N/A	N/A
Primary Care	N/A	2 - Under Resourced	2 - Under Resourced	N/A	N/A	N/A	N/A	N/A	N/A
Psychiatry	1 - Optimized Practice	1 - Optimized Practice	2 - Under Resourced	17.0	15.0	14.8	N/A	N/A	N/A
Psychiatry/Psychology	N/A	N/A	N/A	N/A	N/A	N/A	18.7	15.1	12.2
Psychology	4 - Over Resourced	N/A	2 - Under Resourced	19.1	14.3	20.8	0.2	0.2	0.1
Radiology	N/A	N/A	N/A	12.1	12.3	12.2	2.5	2.5	2.5
Rheumatology	3 - Inefficient	2 - Under Resourced	3 - Inefficient	1.0	1.1	1.0	0.0	0.0	0.7
Surgery	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	3.1	2.6	2.3	4.4	4.3	4.2
Thoracic Surgery	N/A	2 - Under Resourced	2 - Under Resourced	N/A	0.6	0.4	3.2	3.2	2.1
Urology	4 - Over Resourced	N/A	3 - Inefficient	2.4	2.3	2.9	3.6	3.6	3.7
Vascular Surgery	4 - Over Resourced	1 - Optimized Practice	N/A	1.9	1.8	1.8	5.5	5.4	5.7
Total				161.7	162.4	162.4	120.2	122.8	118.6



VISN 10: MichErie Market — Battle Creek

Supply ► Physician Efficiency — Battle Creek VAMC

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Anesthesiology	N/A	N/A	N/A	N/A	N/A	N/A	0.6	2.5	2.4
Cardiology	4 - Over Resourced	N/A	3 - Inefficient	0.9	0.7	0.8	0.8	0.8	0.5
Chiropractic	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	0.9	0.9	0.9	0.3	N/A	0.0
Critical Care / Pulmonary Disease	N/A	N/A	N/A	N/A	N/A	N/A	0.5	0.4	0.3
Emergency Medicine	N/A	N/A	N/A	N/A	N/A	N/A	4.4	3.2	3.3
Endocrinology	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0	0.0
Gastroenterology	4 - Over Resourced	2 - Under Resourced	2 - Under Resourced	0.9	0.9	0.8	0.0	0.0	0.0
Geriatric Medicine	N/A	N/A	N/A	1.6	0.2	0.3	11.9	9.0	7.3
Infectious Disease	2 - Under Resourced	N/A	N/A	0.2	1.0	0.9	0.7	0.7	0.4
Internal Medicine	N/A	N/A	N/A	21.3	24.4	23.2	53.6	64.0	67.1
Neurology	N/A	3 - Inefficient	4 - Over Resourced	0.9	0.9	0.9	1.1	1.0	0.6
Optometry	N/A	N/A	N/A	5.8	5.7	5.9	0.0	0.0	0.0
Pain Medicine	4 - Over Resourced	4 - Over Resourced	3 - Inefficient	0.4	0.4	0.4	0.6	2.5	2.4
Pathology	N/A	N/A	N/A	N/A	N/A	N/A	0.1	0.1	0.1
Physical Medicine & Rehabilitation	1 - Optimized Practice	N/A	1 - Optimized Practice	1.9	2.6	2.5	0.5	0.5	0.4
Plastic Surgery	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	N/A
Podiatry	2 - Under Resourced	2 - Under Resourced	2 - Under Resourced	1.9	2.6	2.7	0.0	0.0	0.0
Primary Care	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Psychiatry	4 - Over Resourced	4 - Over Resourced	3 - Inefficient	17.4	13.3	11.7	N/A	N/A	N/A
Psychiatry/Psychology	N/A	N/A	N/A	N/A	N/A	N/A	20.2	21.2	18.4



VISN 10: MichErie Market — Battle Creek

Supply ► Physician Efficiency — Battle Creek VAMC, cont.

Specialty	SPARQ Quadrant 2016	SPARQ Quadrant 2017	SPARQ Quadrant 2018	2016 MD FTEs	2017 MD FTEs	2018 MD FTEs	2016 APP FTEs	2017 APP FTEs	2018 APP FTEs
Psychology	4 - Over Resourced	N/A	3 - Inefficient	29.1	30.1	26.1	0.0	0.0	0.0
Radiology	N/A	N/A	N/A	1.8	1.8	1.5	1.5	0.9	0.4
Urology	1 - Optimized Practice	1 - Optimized Practice	N/A	0.9	0.8	0.8	0.4	0.4	0.8
Total				85.8	86.3	79.4	97.3	107.3	104.5



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Potential Physician Additional Capacity — Ann Arbor-Michigan VAMC

Physician Specialty	Potential Additional RVU Capacity
Allergy and Immunology	-
Cardiology	-
Chiropracty	-
Critical Care / Pulmonary Disease	1,874
Dermatology	1,071
Endocrinology	-
Gastroenterology	-
Geriatric Medicine	512
Hematology-Oncology	-
Infectious Disease	-
Internal Medicine	-
Nephrology	-
Neurological Surgery	491
Neurology	-
Obstetrics & Gynecology	-
Ophthalmology	-
Optometry	-
Orthopaedic Surgery	-
Otolaryngology	-
Pain Medicine	-

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.MichErie.506



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Potential Physician Additional Capacity — Ann Arbor-Michigan VAMC, cont.

Physician Specialty	Potential Additional RVU Capacity
Pathology	-
Physical Medicine & Rehabilitation	-
Plastic Surgery	-
Podiatry	274
Psychiatry	-
Psychology	-
Radiology	-
Rheumatology	533
Surgery	-
Thoracic Surgery	-
Urology	4,093
Vascular Surgery	-

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.MichErie.506#2



VISN 10: MichErie Market — Battle Creek

Supply ► Potential Physician Additional Capacity — Battle Creek VAMC

Physician Specialty	Potential Additional RVU Capacity
Allergy and Immunology	-
Cardiology	764
Chiropracty	-
Critical Care / Pulmonary Disease	-
Dermatology	-
Endocrinology	-
Gastroenterology	-
Geriatric Medicine	-
Hematology-Oncology	-
Infectious Disease	314
Internal Medicine	7,696
Nephrology	-
Neurological Surgery	-
Neurology	474
Obstetrics & Gynecology	-
Ophthalmology	-
Optometry	-
Orthopaedic Surgery	-
Otolaryngology	-
Pain Medicine	239

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.MichErie.515



VISN 10: MichErie Market — Battle Creek

Supply ► Potential Physician Additional Capacity — Battle Creek VAMC, cont.

Physician Specialty	Potential Additional RVU Capacity
Pathology	-
Physical Medicine & Rehabilitation	-
Plastic Surgery	-
Podiatry	-
Psychiatry	14,675
Psychology	2,766
Radiology	1,896
Rheumatology	-
Surgery	-
Thoracic Surgery	-
Urology	-
Vascular Surgery	-

Potential Additional RVU Capacity = (Productivity Standard – Productivity), N/A = Data Not Available

Source: OPES Physician Capacity Reports

6.6.V10.MichErie.515#2



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Physicians by Outpatient Clinical Category

FY18 Ann Arbor-Michigan VAMC & CBOC Physicians by Outpatient Clinical Category					
VA Facility	Primary Care*	Specialty Care	Emergency Care	Mental Health	Total
(V10) (506) Ann Arbor-Michigan	27.5	54.5	4.7	24.8	111.5
(V10) (506GA) Toledo	9.9	2.6	0.0	6.1	18.6
(V10) (506GB) Flint - (V10) Eastern Michigan	3.1	0.0	0.0	1.1	4.3
(V10) (506GC) Jackson-Michigan Center	2.6	0.0	0.0	0.5	3.0
(V10) (506QA) Ann Arbor-Packard Road	2.2	0.5	0.0	3.1	5.8
(V10) (506QB) Green Road	0.0	3.6	0.0	0.0	3.6

*Primary Care includes Internal Medicine and Geriatric Medicine

Note: Contract clinics do not have FTEs represented.

Source: VSSC Physician Productivity Cube

6.7.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Supply ► Physicians by Outpatient Clinical Category

FY18 Battle Creek VAMC & CBOC Physicians by Outpatient Clinical Category					
VA Facility	Primary Care*	Specialty Care	Emergency Care	Mental Health	Total
(V10) (515) Battle Creek	8.0	8.6	0.0	22.0	38.5
(V10) (515BU) Battle Creek Domiciliary	0.0	0.0	0.0	3.3	3.3
(V10) (515BY) Wyoming	8.7	8.1	0.0	7.0	23.8
(V10) (515GA) Muskegon	2.5	0.0	0.0	1.6	4.0
(V10) (515GB) Lansing South	2.5	0.0	0.0	2.4	4.9
(V10) (515GC) Benton Harbor - (V10) Indiana	1.8	0.0	0.0	1.5	3.3
(V10) (515PA) Battle Creek PR RTP	0.0	0.0	0.0	0.0	0.0

*Primary Care includes Internal Medicine and Geriatric Medicine

Note: Contract clinics do not have FTEs represented.

Source: VSSC Physician Productivity Cube

6.7.V10.MichErie.515



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Vacant Positions

Ann Arbor-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
0083 Police	N/A	2.0
0102 Social Science Aid and Technician	5.0	5.0
0180 Psychology	0.6	2.6
0185 Social Work	4.5	11.5
0186 Social Services Aid And Assistant	N/A	2.0
0201 Human Resources Management	7.0	9.0
0203 Human Resources Assistance	6.0	9.0
0260 Equal Employment Opportunity	N/A	1.0
0301 Miscellaneous Administration and Program	7.0	9.0
0303 Miscellaneous Clerk and Assistant	1.0	8.0
0305 Mail and File	1.0	2.0
0309 Correspondence Clerk	N/A	1.0
0318 Secretary	4.0	7.0
0343 Management and Program Analysis	3.0	4.0
0401 General Natural Resources Management And Biol...	N/A	2.0
0404 Biological Science Technician	N/A	1.0
0503 Financial Clerical and Assistance	1.0	1.0
0525 Accounting Technician	1.0	1.0
0544 Civilian Pay	N/A	1.0
0560 Budget Analysis	N/A	2.0
0601 General Health Science	9.9	15.2
0602 Medical Officer	15.1	23.8
0603 Physician's Assistant	1.0	1.0
0605 Nurse Anesthetist	N/A	1.9
0610 Nurse	45.4	83.4

*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.MichErie.506



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Vacant Positions, cont.

Ann Arbor-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
0620 Practical Nurse	21.2	29.5
0621 Nursing Assistant	11.6	12.6
0622 Medical Supply Aide and Technician	5.0	4.0
0631 Occupational Therapist	N/A	1.0
0633 Physical Therapist	3.0	2.0
0640 Health Aid and Technician	8.4	12.4
0644 Medical Technologist	2.0	4.0
0645 Medical Technician	1.0	1.0
0647 Diagnostic Radiologic Technologist	1.0	2.5
0649 Medical Instrument Technician	5.0	4.0
0660 Pharmacist	3.0	5.5
0661 Pharmacy Technician	1.0	4.0
0665 Speech Pathology and Audiology	N/A	1.0
0669 Medical Records Administration	N/A	1.0
0671 Health System Specialist	1.0	1.0
0672 Prosthetic Representative	N/A	1.0
0675 Medical Records Technician	1.0	6.0
0679 Medical Support Assistance	25.3	39.8
0680 Dental Officer	N/A	1.0
0681 Dental Assistant	0.5	1.5
0699 Medical and Health Student Trainee	0.0	0.0
0801 General Engineering	1.0	1.0
0802 Engineering Technical	N/A	1.0
0858 Biomedical Engineering	1.0	1.0
1035 Public Affairs	N/A	1.0

*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.MichErie.506#2



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Vacant Positions, cont.

Ann Arbor-Michigan VAMC Open FTE Positions		
Occupation	FY18	FY19*
1101General Business And Industry	N/A	2.0
1105 Purchasing	1.0	1.0
1712Training Instruction	N/A	1.0
2003 Supply Program Management	1.0	2.0
2005 Supply Clerical and Technician	3.0	10.0
2010 Inventory Management	2.0	3.0
2102Transportation Clerk And Assistant	N/A	1.0
3566 Custodial Worker	5.0	8.0
4701Misc General Maintenance and Operations Work	N/A	1.0
5703 Motor Vehicle Operator	1.0	2.0
6907 Materials Handler	N/A	4.0
7408 Food Service Worker	2.0	4.0
Grand Total	219.6	384.2

*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.MichErie.506#3



VISN 10: MichErie Market — Battle Creek

Supply ► Vacant Positions

Battle Creek VAMC Open FTE Positions		
Occupation	FY18	FY19*
0060 Chaplain	2.0	N/A
0083 Police	3.0	3.0
0086 Security Clerical and Assistance	2.0	N/A
0102 Social Science Aid and Technician	2.0	1.0
0180 Psychology	5.0	4.0
0185 Social Work	7.0	11.0
0203 Human Resources Assistance	N/A	1.0
0260Equal Employment Opportunity	N/A	1.0
0301 Miscellaneous Administration and Program	1.0	2.0
0303 Miscellaneous Clerk and Assistant	4.0	4.0
0318 Secretary	2.0	2.0
0340 Program Management & 0344 Management and ...	N/A	1.0
0341 Administrative Officer	N/A	1.0
0343 Management and Program Analysis	N/A	2.0
0503 Financial Clerical and Assistance	1.0	1.0
0525 Accounting Technician	1.0	2.0
0544 Civilian Pay	N/A	1.0
0601 General Health Science	N/A	1.0
0602 Medical Officer	8.0	12.2
0603 Physician's Assistant	N/A	2.0
0610 Nurse	21.0	30.0
0620 Practical Nurse	2.0	11.0
0621 Nursing Assistant	11.0	19.0
0622 Medical Supply Aide and Technician	N/A	1.0
0631 Occupational Therapist	N/A	1.0

*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.MichErie.515



VISN 10: MichErie Market — Battle Creek

Supply ► Vacant Positions, cont.

Battle Creek VAMC Open FTE Positions		
Occupation	FY18	FY19*
0633 Physical Therapist	N/A	1.0
0636 Rehabilitation Therapy Assistant	2.0	N/A
0638 Recreation/Creative Arts Therapist	2.0	1.0
0640 Health Aid and Technician	1.0	1.0
0644 Medical Technologist	2.0	1.0
0645 Medical Technician	1.0	1.5
0647 Diagnostic Radiologic Technologist	N/A	2.2
0649 Medical Instrument Technician	1.0	2.0
0660 Pharmacist	N/A	3.0
0661 Pharmacy Technician	1.0	N/A
0662 Optometrist	1.0	N/A
0665 Speech Pathology and Audiology	1.0	N/A
0672 Prosthetic Representative	N/A	2.0
0675 Medical Records Technician	1.0	2.0
0679 Medical Support Assistance	5.0	15.0
0680 Dental Officer	N/A	1.0
0681 Dental Assistant	1.0	2.4
0682Dental Hygiene	N/A	0.4
0801 General Engineering	1.0	1.0
0802Engineering Technical	N/A	1.0
1008Interior Design	N/A	0.6
1105 Purchasing	N/A	1.0
1601 General Facilities and Equipment	1.0	1.0
1715 Vocational Rehabilitation	1.0	1.0
2005 Supply Clerical and Technician	N/A	1.0

*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.MichErie.515#2



VISN 10: MichErie Market — Battle Creek

Supply ► Vacant Positions, cont.

Battle Creek VAMC Open FTE Positions		
Occupation	FY18	FY19*
2102Transportation Clerk And Assistant	N/A	1.0
3566 Custodial Worker	4.2	4.8
5406Utility Systems Operating	N/A	1.0
5703 Motor Vehicle Operator	1.0	1.0
7404 Cook	1.0	N/A
7408 Food Service Worker	4.5	1.0
Grand Total	104.7	165.1

*FY19 vacant positions as of March 2019

Source: VHA Office of Workforce Management

6.8.V10.MichErie.515#3

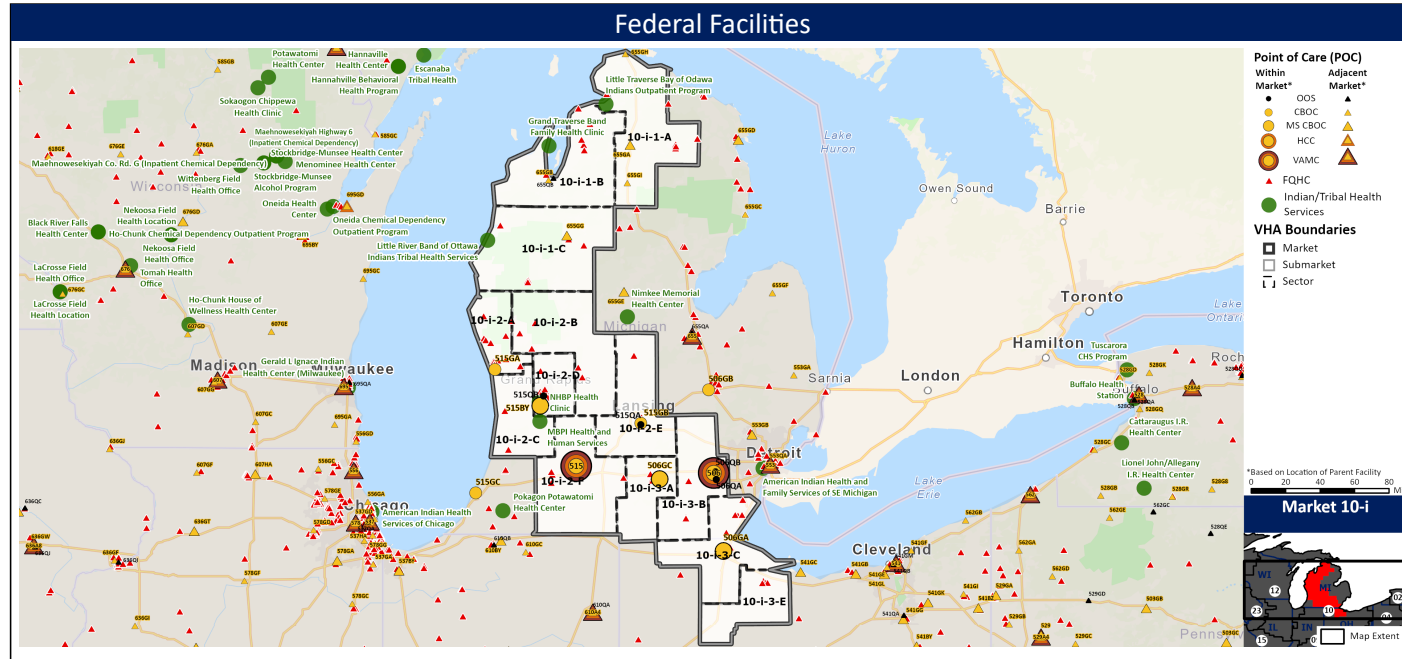


Supply ▶ **Estimated Current Total Community
Market Supply**



VISN 10: MichErie Market

Supply ► Existing Federal Facilities





VISN 10: MichErie Market

Supply ► Existing Federal Facilities, cont.

Sector	Type*	Partner Facility Name**	Distance From VA POC (x miles, POC Name)
10-i-1-A	FQHC (7)	<ul style="list-style-type: none"> ●Montmorency County Jail ●Atlanta Community Schools ●Thunder Bay Comm Health Service - Atlanta 	<ul style="list-style-type: none"> ●35, (V10) (655GA) Gaylord, MI ●32, (V10) (655GA) Gaylord, MI ●32, (V10) (655GA) Gaylord, MI
10-i-1-A	IHS (1)	●Little Traverse Bay of Odawa Indians Outpatient Program	●34, (V10) (655GA) Gaylord, MI
10-i-1-B	FQHC (7)	<ul style="list-style-type: none"> ●Charlevoix Area Hospital ●Meadow Brook Med Care Facility ●Central Lake Family Hlth Center 	<ul style="list-style-type: none"> ●47, (V10) (655QB) Grand Traverse, MI ●36, (V10) (655QB) Grand Traverse, MI ●35, (V10) (655GA) Gaylord, MI
10-i-1-B	IHS (1)	●Grand Traverse Band Family Health Clinic	●22, (V10) (655QB) Grand Traverse, MI
10-i-1-C	FQHC (6)	<ul style="list-style-type: none"> ●Baldwin Teen Health Center ●Family Health Care Counseling Ctr ●Baldwin Family Health Care 	<ul style="list-style-type: none"> ●48, (V10) (655GG) Cadillac, MI ●48, (V10) (655GG) Cadillac, MI ●48, (V10) (655GG) Cadillac, MI
10-i-1-C	IHS (1)	●Little River Band of Ottawa Indians Tribal Health Services	●52, (V10) (655GG) Cadillac, MI
10-i-2-A	FQHC (15)	<ul style="list-style-type: none"> ●Hesperia Public Schools ●Montague Public Schools Sbhc ●Holton Public Schools Sbhc 	<ul style="list-style-type: none"> ●35, (V10) (515GA) Muskegon, MI ●27, (V10) (515GA) Muskegon, MI ●26, (V10) (515GA) Muskegon, MI
10-i-2-B	FQHC (6)	<ul style="list-style-type: none"> ●Family Health Care - White Cloud ●Family Health Care - Benson ●Montcalm Area Health Center 	<ul style="list-style-type: none"> ●47, (V10) (515GA) Muskegon, MI ●47, (V10) (515GA) Muskegon, MI ●33, (V10) (515QB) Century Avenue, MI

*FQHC quantity in parentheses reflects total number of FQHCs within a sector.

**The three FQHCs listed reflect the three most distant FQHCs from a VA POC.

Source: 1. FQHC – HRSA Data Warehouse 2. IHS – ESRI Meta Data 3. DoD – Federal Practitioner - 2019 Directory

7.1.V10.MichErie



VISN 10: MichErie Market

Supply ► Existing Federal Facilities, cont.

Sector	Type*	Partner Facility Name**	Distance From VA POC (x miles, POC Name)
10-i-2-C	IHS (1)	●MBPI Health and Human Services	●10, (V10) (515BY) Wyoming, MI
10-i-2-D	FQHC (17)	●Sparta Health Center ●The Salvation Army Booth Clinic ●Ottawa Hills High School Hlth Ctr	●15, (V10) (515QB) Century Avenue, MI ●4, (V10) (515QB) Century Avenue, MI ●4, (V10) (515QB) Century Avenue, MI
10-i-2-D	IHS (1)	●NHBP Health Clinic	●2, (V10) (515BY) Wyoming, MI
10-i-2-E	FQHC (13)	●Hdi Ithaca Migrant Site ●Otto Community Health Center ●Ichd Mobile Van - Loaves And Fishes	●43, (V10) (655GE) Clare, MI ●3, (V10) (515GB) Lansing South, MI ●3, (V10) (515GB) Lansing South, MI
10-i-2-F	FQHC (8)	●Family Health Center Of Albion ●City Of Portage ●Community Mental Health Clinic	●24, (V10) (506GC) Jackson-Michigan Center, MI ●21, (V10) (515) Battle Creek, MI ●17, (V10) (515) Battle Creek, MI
10-i-3-A	FQHC (8)	●Center For Family Health, Inc. ●Center For Family Health, Inc ●Downtown Site	●8, (V10) (506GC) Jackson-Michigan Center, MI ●8, (V10) (506GC) Jackson-Michigan Center, MI ●7, (V10) (506GC) Jackson-Michigan Center, MI
10-i-3-B	FQHC (3)	●Family Medical Center Of Mi Lenawee County ●Family Medical Center Lenawee Dental Clinic ●Hdi Migrant Camp Site	●35, (V10) (506GC) Jackson-Michigan Center, MI ●35, (V10) (506GC) Jackson-Michigan Center, MI ●19, (V10) (506QA) Ann Arbor-Packard Road, MI
10-i-3-C	FQHC (13)	●Family Medical Center - Monroe Mental Health Authority Site ●Family Medical Center ●Family Medical Center Of Michigan Monroe	●33, (V10) (506QA) Ann Arbor-Packard Road, MI ●31, (V10) (506QA) Ann Arbor-Packard Road, MI ●29, (V10) (506GA) Toledo, OH

*FQHC quantity in parentheses reflects total number of FQHCs within a sector.

**The three FQHCs listed reflect the three most distant FQHCs from a VA POC.



VISN 10: MichErie Market

Supply ► Existing Federal Facilities, cont.

Sector	Type*	Partner Facility Name**	Distance From VA POC (x miles, POC Name)
10-i-3-E	FQHC (6)	<ul style="list-style-type: none">●The Center For Womens Health●West Side Pediatrics Associates●Fremont Family Practice	<ul style="list-style-type: none">●28, (V10) (541GC) Sandusky, OH●25, (V10) (541GC) Sandusky, OH●24, (V10) (541GC) Sandusky, OH

*FQHC quantity in parentheses reflects total number of FQHCs within a sector.

**The three FQHCs listed reflect the three most distant FQHCs from a VA POC.

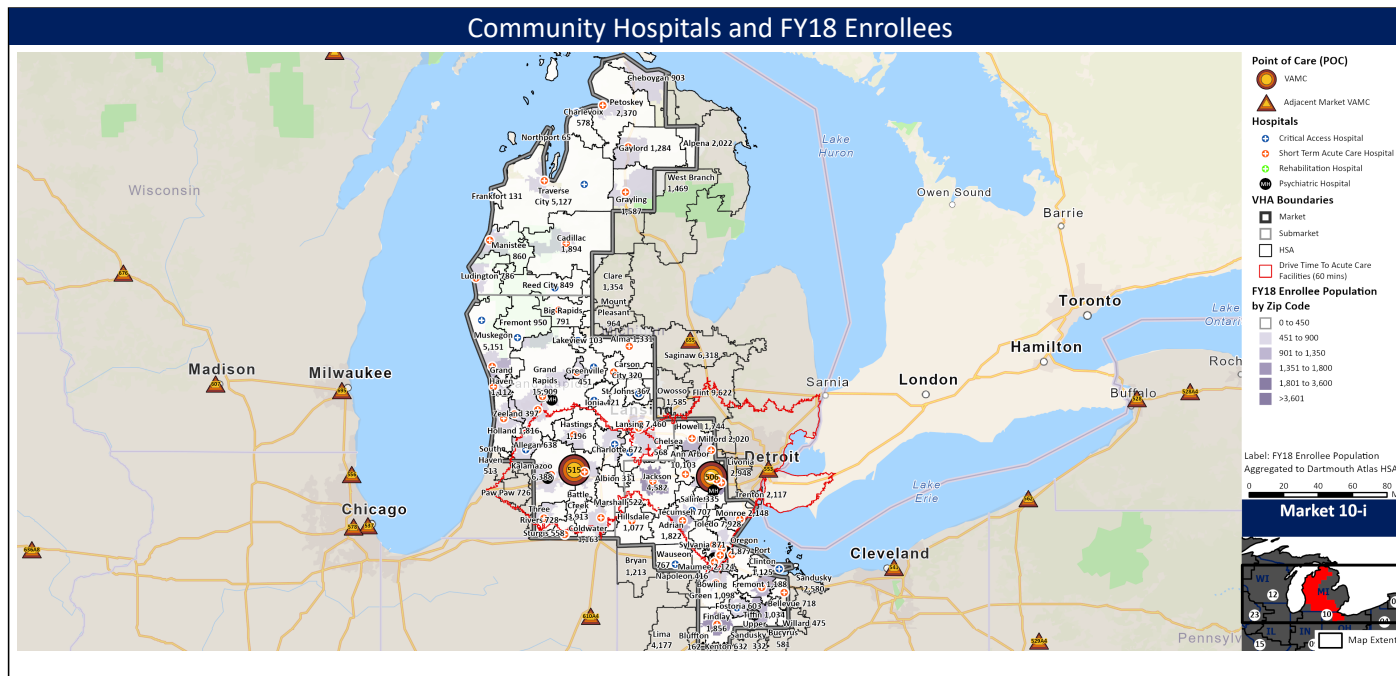
Source: 1. FQHC – HRSA Data Warehouse 2. IHS – ESRI Meta Data 3. DoD – Federal Practitioner - 2019 Directory

7.1.V10.MichErie#3



VISN 10: MichErie Market

Supply ► Market Community Hospital Overview



Note: Map provides context of community hospital density as map scale prevents illustration of all hospitals.

A Dartmouth Atlas Hospital Service Area (HSA) is a ZIP code-defined geography encompassing the community where the ZIP code's Medicare residents predominantly receive their hospital care.

Source: 1. Definitive Healthcare 2. Geocoded Enrollee File FY18Q4

7.2.V10.MichErie#IMG



VISN 10: MichErie Market

Supply ► Market Community Hospital Overview, cont.

Community Hospital Overview			
VAMC Area	Hospitals*	Total Staffed Beds	Total Occupancy**
(506) Ann Arbor	57	12,414	63.7%
(515) Battle Creek	14	1,556	53.2%
Total Hospitals in the Market	78	11,082	58.1%

Note: The VAMC area is defined as the area within a 60 minute drive time of VAMC.

*Includes short term acute, critical access, psychiatric, and rehabilitation hospitals with a CMS Cost Report in FY17 or FY18 (does not include pediatric or DOD hospitals) and can include multi-campus hospitals reporting under a single provider number.

**Occupancy is based on total staffed beds.



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Community Hospital Current and Future Inpatient Demand & Supply

Top Hospitals ^{1,2}	Med/Surg/Acute		Mental Health		Rehab		CMI
	Beds ³	Occupancy ⁴	Beds ³	Occupancy ⁴	Beds ³	Occupancy ⁴	
Beaumont Hospital - Royal Oak	998	75.7%	30	77.5%	61	81.3%	1.72
University Hospital, Von Voigtlander Womens Hospital	931	73.0%	43	83.7%	32	91.5%	2.39
Henry Ford Hospital	682	74.6%	N/A	N/A	N/A	N/A	2.15
ProMedica Toledo Hospital	636	61.0%	33	62.2%	N/A	N/A	2.14
Beaumont Hospital - Dearborn	632	67.5%	N/A	N/A	N/A	N/A	1.80
Ascension Providence Hospital - Southfield Campus, Novi Campus	582	59.6%	25	82.8%	16	45.8%	1.78
Ascension St John Hospital	546	62.3%	27	67.7%	36	42.2%	1.94
St Joseph Mercy Ann Arbor	444	70.6%	24	87.3%	30	72.8%	1.80
Ascension Macomb-Oakland Hospital - Warren Campus, Madison Heights Campus	427	64.9%	54	77.8%	24	59.0%	1.63
Hurley Medical Center	370	66.1%	35	85.9%	13	53.6%	1.54
DMC Sinai-Grace Hospital	369	66.8%	21	70.7%	12	73.3%	1.55
St Joseph Mercy Oakland	369	60.3%	33	77.8%	30	46.5%	1.78
Ascension Genesys Hospital	350	67.9%	N/A	N/A	20	60.5%	1.87
DMC Harper University Hospital	346	69.8%	N/A	N/A	N/A	N/A	1.76
Henry Ford Allegiance Health	313	56.0%	32	72.0%	N/A	N/A	1.61
Other Hospitals in Area (42)	1,592	49.1%	658	82.2%	97	61.4%	1.58
Total	3,916	59.7%	790	81.2%	159	69.6%	1.68

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

* Includes acute rehabilitation

Source: 1. CMS Cost Reports 2. IBM Market Expert

7.3.V10.MichErie.506



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Community Hospital Current and Future Inpatient Demand & Supply, cont.

Future Supply and Demand													
	2018						Estimated 2028						
	ADC	BDOC	Actual Beds	2018 Actual Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need	Projection Rate	ADC	BDOC	Actual Beds	2028 Projected Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need
Medicine/Surgical*	8,313	3,034,182	13,060	63.7%	11,084	10,391	0.8%	8,170	2,982,186	13,060	62.6%	10,894	10,213
Medicine/Surgical* Conceptual Excess					1,976	2,669						2,166	2,847
Mental Health	1,626	593,591	2,011	80.9%	2,168	2,033	16.0%	1,887	688,652	2,011	93.8%	2,516	2,358
Mental Health Conceptual Excess					-157	-22						-505	-347

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

* Includes acute rehabilitation



VISN 10: MichErie Market — Battle Creek

Supply ► Community Hospital Current and Future Inpatient Demand & Supply

Top Hospitals ^{1,2}	Med/Surg/Acute		Mental Health		Rehab		CMI
	Beds ³	Occupancy ⁴	Beds ³	Occupancy ⁴	Beds ³	Occupancy ⁴	
Bronson Methodist Hospital	415	66.7%	N/A	N/A	N/A	N/A	1.97
Henry Ford Allegiance Health	313	56.0%	32	72.0%	N/A	N/A	1.61
Ascension Borgess Hospital	286	63.0%	52	64.6%	15	78.0%	1.93
Kalamazoo Psychiatric Hospital	N/A	N/A	183	99.3%	N/A	N/A	N/A
Bronson Battle Creek Hospital	159	52.7%	39	58.3%	N/A	N/A	1.61
ProMedica Coldwater Regional Hospital	87	32.9%	N/A	N/A	N/A	N/A	1.27
Oaklawn Hospital	78	50.4%	N/A	N/A	N/A	N/A	1.73
Spectrum Health Pennock	49	37.4%	N/A	N/A	N/A	N/A	1.39
Three Rivers Health	48	14.8%	N/A	N/A	12	28.7%	1.36
Lakeland Hospital Watervliet	26	2.9%	N/A	N/A	18	72.7%	1.39
Bronson LakeView Hospital*	25	17.3%	10	72.4%	N/A	N/A	N/A
Hayes Green Beach Memorial Hospital*	25	20.7%	N/A	N/A	N/A	N/A	N/A
Allegan General Hospital*	25	24.7%	N/A	N/A	N/A	N/A	N/A
Eaton Rapids Medical Center*	20	13.8%	N/A	N/A	N/A	N/A	N/A
Other Hospitals in Area (0)		N/A		N/A		N/A	N/A
Total	1,505	54.7%	306	85.3%	27	56.1%	1.61

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

* Includes acute rehabilitation

Source: 1. CMS Cost Reports 2. IBM Market Expert

7.3.V10.MichErie.515



VISN 10: MichErie Market — Battle Creek

Supply ► Community Hospital Current and Future Inpatient Demand & Supply, cont.

Future Supply and Demand													
	2018						Estimated 2028						
	ADC	BDOC	Actual Beds	2018 Actual Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need	Projection Rate	ADC	BDOC	Actual Beds	2028 Projected Occupancy	75% Occupancy Bed Need	80% Occupancy Bed Need
Medicine/Surgical*	857	312,671	1,601	53.5%	1,142	1,071	1.8%	858	313,343	1,601	53.6%	1,145	1,073
Medicine/Surgical* Conceptual Excess					459	530						456	528
Mental Health	268	97,924	316	84.9%	358	335	20.0%	322	117,473	316	101.9%	429	402
Mental Health Conceptual Excess					-42	-19						-113	-86

1. Top hospitals based on number of staffed beds. 2. All beds within acute psychiatric and rehab commercial hospitals were assumed to be psychiatric or rehab beds. 3. Indicates staffed beds 4. Occupancy rate = total Bed Days of Care (BDOC) divided by staffed operating beds. 5. Applied growth rate and assumes actual beds remains the same. 6. BDOC and Projection Rate from IBM Market Expert

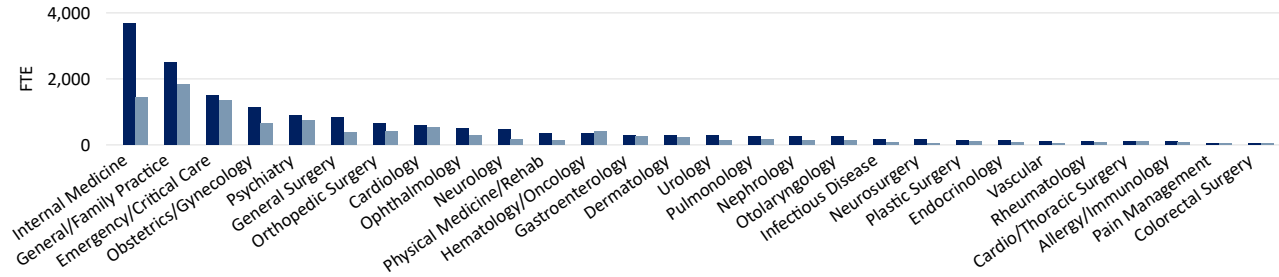
* Includes acute rehabilitation



VISN 10: MichErie Market — Ann Arbor-Michigan

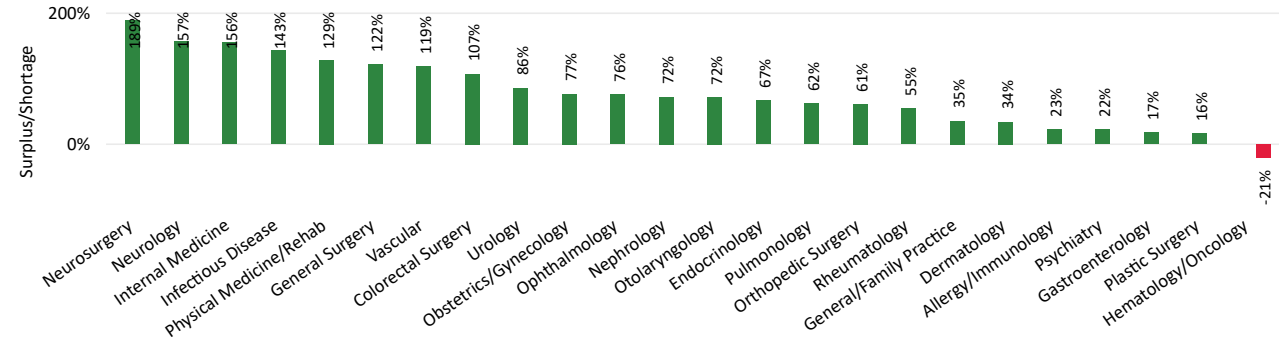
Supply ► Community Physician Current Supply & Demand

2018 FTE Supply and 2018 FTE Demand by Specialty*



● 2018 FTE Supply ● 2018 FTE Demand

Provider Surplus/Shortage vs. 2018 FTE Demand



*FTE net percentage of supply for specialties between -15% and 15% are not included given the FTE supply for those specialties are comparable to FTE demand

Note: FTE demand based on median productivity by specialty

Sources: IBM Watson Market Expert

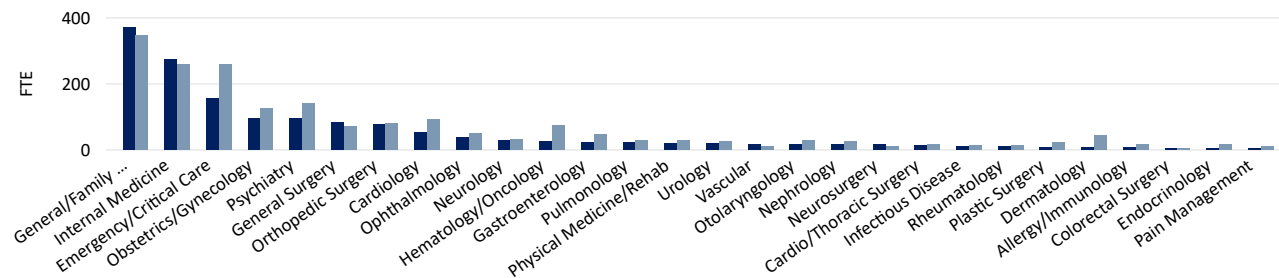
Specialty	2018 FTE Supply	2018 FTE Demand	Shortage/Surplus
1. Primary Care			
General/Family Practice	2,490	1,840	650
Internal Medicine	3,684	1,442	2,242
2. Specialty Care (Medical)			
Allergy/Immunology	108	88	20
Cardiology	599	531	67
Dermatology	293	219	74
Endocrinology	138	83	55
Gastroenterology	297	253	44
Hematology/Oncology	335	423	-87
Infectious Disease	166	68	98
Nephrology	259	151	109
Neurology	459	179	280
Pulmonology	261	161	100
Rheumatology	115	75	41
3. Specialty Care (Surgical)			
Cardio/Thoracic Surgery	108	94	14
Colorectal Surgery	41	20	21
General Surgery	824	371	453
Neurosurgery	163	57	107
Ophthalmology	509	290	220
Orthopedic Surgery	662	411	251
Otolaryngology	248	144	104
Plastic Surgery	139	119	19
Urology	275	148	127
Vascular	119	54	65
4. Women's Health			
Obstetrics/Gynecology	1,144	648	496
5. Mental Health			
Psychiatry	908	742	166
6. Rehab			
Physical Medicine/Rehab	340	149	191
7. Emergency Services			
Emergency/Critical Care	1,503	1,352	152
8. Other Services			
Pain Management	58	56	2



VISN 10: MichErie Market — Battle Creek

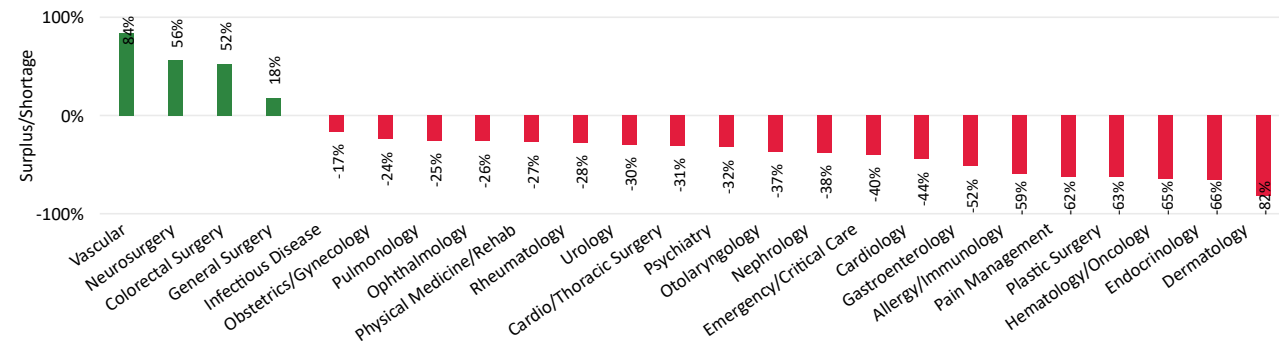
Supply ► Community Physician Current Supply & Demand

2018 FTE Supply and 2018 FTE Demand by Specialty*



● 2018 FTE Supply ● 2018 FTE Demand

Provider Surplus/Shortage vs. 2018 FTE Demand



*FTE net percentage of supply for specialties between -15% and 15% are not included given the FTE supply for those specialties are comparable to FTE demand

Note: FTE demand based on median productivity by specialty

Sources: IBM Watson Market Expert

Specialty	2018 FTE Supply	2018 FTE Demand	Shortage/Surplus
1. Primary Care			
General/Family Practice	371	347	24
Internal Medicine	274	259	15
2. Specialty Care (Medical)			
Allergy/Immunology	7	17	-10
Cardiology	52	94	-42
Dermatology	8	43	-35
Endocrinology	5	15	-10
Gastroenterology	23	48	-25
Hematology/Oncology	26	73	-47
Infectious Disease	11	13	-2
Nephrology	17	27	-10
Neurology	29	33	-3
Pulmonology	22	29	-7
Rheumatology	10	13	-4
3. Specialty Care (Surgical)			
Cardio/Thoracic Surgery	12	18	-5
Colorectal Surgery	6	4	2
General Surgery	83	70	13
Neurosurgery	17	11	6
Ophthalmology	37	50	-13
Orthopedic Surgery	78	79	-1
Otolaryngology	18	28	-10
Plastic Surgery	9	23	-14
Urology	19	27	-8
Vascular	18	10	8
4. Women's Health			
Obstetrics/Gynecology	95	126	-30
5. Mental Health			
Psychiatry	95	140	-45
6. Rehab			
Physical Medicine/Rehab	20	28	-8
7. Emergency Services			
Emergency/Critical Care	156	260	-104
8. Other Services			
Pain Management	4	10	-6



Supply ► Known Major Changes in Community Hospitals – Ann Arbor-Michigan Area

Community Hospitals in the Ann Arbor-Michigan Area

New Facilities/Capability/Residency

- Beaumont Health will occupy a four-story medical office building in Livonia to house primary and specialty care physicians, provide emergency care, imaging, outpatient surgery, cancer treatment services, physical therapy among others. Expected completion is 2020. (Article Date: 04/2019)
- Detroit Medical Center plans to add 79 new Medicare-funded residency slots to its graduate medical education programs to help advance training in medical specialties. (Article Date: 01/2019)
- Beaumont Health plans to develop a new outpatient care campus in Lenox Township in 2020, offering primary, specialty and emergency care, imaging, outpatient surgery, and physical therapy. Construction will begin in late 2019 and complete in 2020. (Article Date: 03/2019)
- Harley Ellis Devereaux completed the Robert H. and Judy Dow Alexander Cancer Center at the St. Joseph Mercy Ann Arbor's hospital campus. The expanded 66,000 square foot, \$24 million renovation was designed to accommodate growth and to enhance cancer research and treatment facilities. (Article Date: 01/2019)
- The Center for Integrative Medicine at Henry Ford Medical Center-Ford Road in Dearborn opened on November 14, 2018. Center for Integrative Medicine practices merge oriental and eastern medicine with western healthcare to provide patients the benefits of acupuncture, massage and other integrative medicine treatments for a range of ailments, conditions, and diseases. (Article Date: 11/2018)
- Beaumont Health partnered with Universal Health Services (UHS) and plans to build a new \$40 million 150-bed mental health hospital in Dearborn. Construction began in early 2019 and the facility will be operated, managed and majority owned by UHS. (Article Date: 11/2018)
- In September 2018, University of Michigan Kellogg Eye Center opened its most comprehensive community eye clinic at Michigan Medicine's Brighton Center for Specialty Care, which offers minimally invasive, complex eye procedures, and the latest laser technology for vision correction. (Article Date: 10/2018)
- Henry Ford Health System will occupy the entirety of the new Royal Oak City Center with a six-story, high-tech outpatient medical center, expected to open in mid-2020. Services will include primary care, outpatient surgery, women's health, sports medicine, pediatrics, rehabilitation, and radiology. (Article Date: 09/2018)
- Effective August 20, 2018, Michigan Trinity Health At Home and Saint Joseph Health VNA Home Care in Indiana joined together to become dually certified in Indiana and Michigan, overcoming state regulations that limited access to home health for people living in both states. (Article Date: 08/2018)



VISN 10: MichErie Market — Ann Arbor-Michigan

Supply ► Known Major Changes in Community Hospitals – Ann Arbor-Michigan Area, cont.

Community Hospitals in the Ann Arbor-Michigan Area

Mergers/Acquisitions/Partnerships

- Detroit Medical Center (DMC) and Meharry Medical College announced on April 4, 2019 the expansion of their affiliation to provide additional medical education and training for Meharry students in Metro Detroit. The two-year agreement will increase the number of medical students across all DMC hospitals. (Article Date: 04/2019)
- Beaumont Health System and Alternate Solutions Health Network have partnered in a new home health and hospice joint venture designed to expand patient access to care. The new organization is called Beaumont Home Health and Hospice and began operations January 1, 2019. (Article Date: 01/2019)
- Welltower Inc. and ProMedica jointly acquired Quality Care Properties, Inc. and its principal tenants, HCR ManorCare and Arden Courts, in July 2018 for \$4.4 billion. (Article Date: 07/2018)
- ProMedica Health System reported \$70 million in losses and \$4.9 billion in total revenues for fiscal 2018 since the \$4.4 billion mega-merger with HCR ManorCare closed in July 2018. (Article Date: 03/2019)



VISN 10: MichErie Market — Battle Creek

Supply ► Known Major Changes in Community Hospitals – Battle Creek Area

Community Hospitals in the Battle Creek Area

New Facilities/Capability/Residency

- Bronson Healthcare plans to invest up to \$22 million to develop two new facilities for Bronson South Haven Hospital that will replace the aging hospital and medical office buildings. Plans include the new hospital, a 14-bed emergency department, lab and imaging services, pharmacy, and medical offices for primary care and specialty providers. Expected completion is late 2020. (Article Date: 10/2018)
- A new Bronson urgent care clinic opened on November 12, 2018 in Kalamazoo. (Article Date: 11/2018)
- Henry Ford Allegiance Health opened its three-story, \$45 million expansion in September 2018 to its existing four-story structure, offering 66 new rooms. (Article Date: 08/2018)

Mergers/Acquisitions/Partnerships

- Henry Ford Allegiance Health opened its three-story, \$45 million expansion in September 2018 to its existing four-story structure, offering 66 new rooms. (Article Date: 08/2018)



Access ► **Current Access**



VISN 10: MichErie Market

Access ► Same Day Appointments (FY15-18)

Same Day Appointment Totals

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506) Ann Arbor-Michigan	3,201	2,494	2,559	3,097	2,201	2,132	2,163	2,027	15,089	16,243	15,857	10,941
(V10) (506GA) Toledo	884	664	791	810	3,278	2,511	2,453	2,323	3,917	3,678	3,451	3,139
(V10) (506GB) Flint - (V10) Eastern Michigan	232	153	181	124	395	427	387	391	118	172	139	162
(V10) (506GC) Jackson-Michigan Center	205	157	138	137	759	742	877	784	289	348	357	1,011
(V10) (506QA) Ann Arbor-Packard Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	41	4,279
(V10) (506QB) Green Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	268
Facility Total	4,522	3,468	3,669	4,168	6,633	5,812	5,880	5,525	19,413	20,441	19,845	19,800
(V10) (515) Battle Creek	2,461	2,135	2,452	2,389	5,400	5,644	6,106	5,258	5,776	5,094	4,508	4,590
(V10) (515BY) Wyoming	1,716	1,841	1,907	1,867	3,203	4,202	5,607	5,325	2,529	3,268	5,075	4,747
(V10) (515GA) Muskegon	126	244	260	311	1,422	1,333	1,666	1,418	37	26	41	51
(V10) (515GB) Lansing South	118	169	206	260	2,047	2,131	2,366	2,289	76	52	26	43
(V10) (515GC) Benton Harbor - (V10) Indiana	71	139	189	184	1,353	1,611	1,500	868	95	108	134	27
(V10) (515QA) Lansing North	N/A	N/A	N/A	N/A	N/A	N/A	108	117	N/A	N/A	N/A	N/A
(V10) (515QB) Century Avenue	N/A	N/A	N/A	N/A	N/A	N/A	52	99	N/A	N/A	N/A	N/A

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.1.V10.MichErie



VISN 10: MichErie Market

Access ► Same Day Appointments (FY15-18), cont.

Same Day Appointment Totals

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
Facility Total	4,492	4,528	5,014	5,011	13,425	14,921	17,405	15,374	8,513	8,548	9,784	9,458
(V10) (655GA) Gaylord	99	80	76	78	1,013	950	1,034	920	36	37	33	24
(V10) (655GB) Traverse City	70	43	38	130	888	952	993	766	65	43	49	29
(V10) (655GG) Cadillac	47	66	54	77	641	676	633	490	1,042	1,281	1,765	1,786
(V10) (655GH) Cheboygan County	22	35	53	35	404	532	554	451	14	30	26	11
(V10) (655GI) Grayling	26	36	35	63	529	495	464	417	22	24	15	5
(V10) (655QB) Grand Traverse	N/A	47	156	311	N/A	N/A	N/A	N/A	N/A	8	40	40
Facility Total	264	307	412	694	3,475	3,605	3,678	3,044	1,179	1,423	1,928	1,895
Market Total	9,278	8,303	9,095	9,873	23,533	24,338	26,963	23,943	29,105	30,412	31,557	31,153

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.1.V10.MichErie#2



VISN 10: MichErie Market

Access ► Established Patient Appointments (FY15-18)

Average Established Patient Wait (Days) from Preferred Date (PD)

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (506) Ann Arbor, MI	1.3	2.6	2.9	3.0	3.4	4.9	3.5	3.2	3.8	5.7	4.8	5.3
(3V10) (506GA) Toledo, OH	4.0	1.1	1.6	3.0	5.0	7.9	4.8	5.4	5.8	7.9	7.4	8.0
(3V10) (506GB) Flint, MI	3.2	3.2	3.0	3.8	4.5	5.7	5.2	3.0	1.0	1.1	1.7	0.8
(3V10) (506GC) Jackson Center, MI	3.9	3.3	3.5	4.1	2.8	3.8	2.9	3.7	1.0	0.6	0.5	2.4
(3V10) (506QA) Ann Arbor-Packard Road, MI (Pack...	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.4	2.7
(3V10) (506QB) Green Road, MI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.0
(3V10) (515) Battle Creek, MI	1.2	1.6	2.5	4.4	1.5	2.1	2.2	4.5	4.4	4.1	4.7	8.4
(3V10) (515BY) Wyoming, MI	1.9	3.6	5.2	4.5	3.0	2.4	2.0	4.5	5.5	6.3	6.7	8.8
(3V10) (515GA) Muskegon, MI	1.4	2.3	2.1	6.7	1.3	1.3	1.4	3.4	1.0	1.5	1.1	2.0
(3V10) (515GB) Lansing South, MI	3.9	5.4	4.4	6.7	1.2	1.7	2.2	3.3	0.6	0.8	0.4	8.9
(3V10) (515GC) Benton Harbor, MI	2.0	1.0	1.3	2.7	1.1	0.7	0.9	3.4	0.6	1.6	1.2	1.5
(3V10) (515QA) Lansing North, MI	N/A	N/A	N/A	N/A	N/A	N/A	0.6	1.2	N/A	N/A	N/A	N/A
(3V10) (515QB) Century Avenue, MI	N/A	N/A	N/A	N/A	N/A	N/A	1.1	2.5	N/A	N/A	N/A	N/A
(3V10) (655GA) Gaylord, MI	0.6	0.5	0.7	1.9	0.8	0.8	1.9	2.5	0.7	3.1	2.3	2.1
(3V10) (655GB) Traverse City, MI (Colonel Demas T....	1.1	2.1	0.7	1.4	0.9	2.4	2.3	3.4	1.5	3.7	1.7	5.5

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.2.V10.MichErie



VISN 10: MichErie Market

Access ► Established Patient Appointments (FY15-18), cont.

Average Established Patient Wait (Days) from Preferred Date (PD)

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (655GG) Cadillac, MI	0.7	1.6	1.9	2.2	0.5	1.3	2.3	2.7	2.5	3.5	2.7	2.0
(3V10) (655GH) Cheboygan County, MI	1.4	0.6	1.0	1.9	0.9	0.7	1.4	3.5	1.1	0.6	2.2	5.6
(3V10) (655GI) Grayling, MI	3.2	4.8	3.3	4.1	1.7	3.0	3.8	4.5	4.0	3.1	2.5	2.4
(3V10) (655QB) Grand Traverse, MI	N/A	2.9	2.7	2.7	N/A	N/A	N/A	N/A	N/A	1.8	2.7	4.6
National Average	2.9	2.7	2.6	3.3	4.0	4.4	4.1	4.3	4.5	5.3	5.4	6.3

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.2.V10.MichErie#2



VISN 10: MichErie Market

Access ► Established Patient Appointments (FY15-18), cont.

Established Patient Percent of Appointments Completed within 30 Days of Clinically Indicated/Patient Preference

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506) Ann Arbor-Michigan	99.1%	98.0%	97.9%	97.9%	96.7%	96.0%	97.9%	98.1%	96.3%	93.8%	95.3%	94.7%
(V10) (506GA) Toledo	96.4%	99.3%	99.0%	97.7%	95.3%	91.5%	96.0%	95.4%	94.1%	92.6%	92.6%	92.1%
(V10) (506GB) Flint - (V10) Eastern Michigan	98.2%	98.2%	98.7%	96.1%	97.7%	95.4%	95.2%	99.5%	99.4%	99.5%	99.5%	99.8%
(V10) (506GC) Jackson-Michigan Center	98.6%	99.4%	99.5%	98.4%	98.9%	98.7%	99.4%	99.0%	99.8%	99.8%	100.0%	97.3%
(V10) (506QA) Ann Arbor-Packard Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	98.8%	98.2%
(V10) (506QB) Green Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	96.6%
(V10) (515) Battle Creek	99.5%	99.9%	99.1%	97.6%	99.5%	99.9%	99.8%	97.0%	95.8%	98.2%	98.0%	93.7%
(V10) (515BY) Wyoming	99.4%	99.4%	99.1%	97.7%	98.1%	99.8%	99.8%	97.1%	95.2%	94.7%	93.9%	91.3%
(V10) (515GA) Muskegon	99.7%	99.5%	98.8%	94.7%	99.9%	100.0%	99.9%	98.8%	100.0%	99.9%	99.8%	98.6%
(V10) (515GB) Lansing South	97.7%	98.6%	97.4%	93.4%	99.8%	100.0%	99.7%	99.0%	99.6%	99.8%	100.0%	98.9%
(V10) (515GC) Benton Harbor - (V10) Indiana	99.8%	99.9%	99.9%	99.4%	99.9%	100.0%	99.9%	98.6%	100.0%	99.9%	99.7%	98.5%
(V10) (515QA) Lansing North	N/A	N/A	N/A	N/A	N/A	N/A	100.0%	99.7%	N/A	N/A	N/A	N/A
(V10) (515QB) Century Avenue	N/A	N/A	N/A	N/A	N/A	N/A	100.0%	99.1%	N/A	N/A	N/A	N/A
(V10) (655GA) Gaylord	99.9%	100.0%	99.9%	99.2%	99.9%	100.0%	99.4%	98.8%	99.7%	96.9%	98.1%	99.4%
(V10) (655GB) Traverse City	100.0%	100.0%	100.0%	99.5%	99.9%	100.0%	99.6%	99.1%	99.6%	97.9%	98.7%	94.9%



VISN 10: MichErie Market

Access ► Established Patient Appointments (FY15-18), cont.

Established Patient Percent of Appointments Completed within 30 Days of Clinically Indicated/Patient Preference

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655GG) Cadillac	100.0%	100.0%	99.7%	99.6%	99.9%	100.0%	99.8%	99.4%	96.9%	96.8%	98.7%	99.7%
(V10) (655GH) Cheboygan County	99.7%	100.0%	99.7%	99.1%	99.9%	100.0%	99.7%	99.5%	100.0%	100.0%	99.2%	93.0%
(V10) (655GI) Grayling	98.4%	98.6%	99.3%	98.2%	99.9%	100.0%	98.9%	98.5%	97.3%	98.7%	99.7%	98.9%
(V10) (655QB) Grand Traverse	N/A	100.0%	99.5%	99.1%	N/A	N/A	N/A	N/A	N/A	100.0%	97.5%	97.8%
National Average	97.7%	98.2%	98.5%	97.6%	96.8%	96.8%	97.4%	97.2%	96.1%	95.3%	95.5%	94.5%



VISN 10: MichErie Market

Access ► New Patient Appointments (FY15-18)

Average New Patient Average Wait (Days) from Create Date (CD)

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (506) Ann Arbor, MI	8.0	10.4	9.4	10.4	26.2	21.0	28.4	33.2	22.9	26.4	29.5	30.3
(3V10) (506GA) Toledo, OH	10.3	8.1	12.3	11.9	15.2	18.6	15.2	10.1	29.7	26.7	37.3	38.7
(3V10) (506GB) Flint, MI	14.3	13.9	17.2	19.8	30.3	29.3	29.1	18.6	23.1	11.3	9.5	10.0
(3V10) (506GC) Jackson Center, MI	13.0	11.5	5.8	12.0	12.0	18.8	18.5	18.7	13.1	9.6	6.0	18.5
(3V10) (506QA) Ann Arbor-Packard Road, MI (Packard Road)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11.5	19.2
(3V10) (506QB) Green Road, MI	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40.0
(3V10) (515) Battle Creek, MI	14.4	9.2	7.2	8.9	13.7	17.8	14.6	23.0	21.0	17.1	17.0	18.1
(3V10) (515BY) Wyoming, MI	8.8	6.3	6.5	6.0	16.1	24.0	17.4	24.5	22.5	16.7	21.1	23.6
(3V10) (515GA) Muskegon, MI	10.7	17.7	13.6	18.6	10.9	17.6	14.9	12.6	9.9	9.4	10.8	10.0
(3V10) (515GB) Lansing South, MI	18.7	19.5	19.3	23.2	11.5	11.5	15.5	12.4	11.4	8.5	11.6	12.9
(3V10) (515GC) Benton Harbor, MI	15.6	7.1	8.0	7.0	11.3	10.3	11.0	12.9	7.4	8.3	9.0	23.9
(3V10) (515QA) Lansing North, MI	N/A	N/A	N/A	N/A	N/A	N/A	3.6	14.9	N/A	N/A	N/A	N/A
(3V10) (515QB) Century Avenue, MI	N/A	N/A	N/A	N/A	N/A	N/A	20.5	8.6	N/A	N/A	N/A	N/A
(3V10) (655GA) Gaylord, MI	7.2	6.8	11.3	10.6	13.2	10.9	9.9	11.6	10.5	14.5	16.7	14.4
(3V10) (655GB) Traverse City, MI (Colonel Demas T. Craw)	8.8	11.1	8.8	3.5	12.6	12.1	12.1	15.1	18.9	15.8	18.0	10.3

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.4.V10.MichErie



VISN 10: MichErie Market

Access ► New Patient Appointments (FY15-18), cont.

Average New Patient Average Wait (Days) from Create Date (CD)

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(3V10) (655GG) Cadillac, MI	9.8	10.0	9.2	12.8	19.1	20.4	18.8	28.0	16.5	18.3	18.4	18.6
(3V10) (655GH) Cheboygan County, MI	20.7	10.6	9.8	12.4	12.4	9.9	10.1	11.7	12.6	9.7	12.2	23.0
(3V10) (655GI) Grayling, MI	13.0	17.9	12.1	12.5	11.5	15.7	16.6	23.6	27.8	12.8	17.2	16.2
(3V10) (655QB) Grand Traverse, MI	N/A	10.2	15.1	13.0	N/A	N/A	N/A	N/A	N/A	16.9	20.3	12.9
National Average	12.4	12.0	11.3	11.3	21.2	22.7	22.6	21.2	21.5	21.2	21.0	22.5

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.4.V10.MichErie#2



VISN 10: MichErie Market

Access ► New Patient Appointments (FY15-18), cont.

Percent of New Patient Appointments Completed within 30 Days

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506) Ann Arbor-Michigan	96.3%	93.3%	92.4%	92.2%	67.0%	86.8%	56.0%	38.9%	69.5%	64.7%	61.4%	60.1%
(V10) (506GA) Toledo	96.2%	98.3%	96.0%	92.2%	95.1%	80.5%	94.6%	96.7%	58.4%	65.4%	51.1%	55.9%
(V10) (506GB) Flint - (V10) Eastern Michigan	89.1%	96.4%	87.2%	85.2%	53.8%	50.1%	54.6%	90.9%	69.0%	86.8%	88.0%	87.2%
(V10) (506GC) Jackson-Michigan Center	92.1%	93.0%	100.0%	87.3%	97.6%	93.9%	91.7%	91.0%	78.8%	87.0%	96.2%	67.4%
(V10) (506QA) Ann Arbor-Packard Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	99.3%	80.4%
(V10) (506QB) Green Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	55.5%
(V10) (515) Battle Creek	87.1%	96.9%	99.0%	97.3%	89.2%	91.1%	91.5%	77.7%	70.0%	80.4%	85.0%	81.4%
(V10) (515BY) Wyoming	95.9%	98.2%	96.3%	97.3%	84.9%	71.5%	84.8%	67.1%	67.2%	83.1%	72.5%	67.0%
(V10) (515GA) Muskegon	95.4%	79.5%	86.7%	77.1%	99.1%	88.7%	90.2%	96.1%	94.2%	95.6%	92.9%	95.0%
(V10) (515GB) Lansing South	83.3%	85.1%	71.8%	73.6%	95.9%	96.7%	86.4%	94.6%	90.8%	95.8%	94.4%	88.2%
(V10) (515GC) Benton Harbor - (V10) Indiana	87.5%	98.2%	97.6%	98.9%	96.7%	99.5%	96.5%	95.3%	98.0%	96.9%	96.5%	73.1%
(V10) (515QA) Lansing North	N/A	N/A	N/A	N/A	N/A	N/A	100.0%	100.0%	N/A	N/A	N/A	N/A
(V10) (515QB) Century Avenue	N/A	N/A	N/A	N/A	N/A	N/A	80.0%	100.0%	N/A	N/A	N/A	N/A
(V10) (655GA) Gaylord	100.0%	100.0%	92.5%	95.7%	94.7%	98.5%	97.5%	97.7%	94.2%	84.0%	84.0%	89.3%
(V10) (655GB) Traverse City	96.0%	94.7%	94.1%	99.3%	96.2%	96.9%	97.1%	93.2%	83.9%	86.8%	81.6%	93.3%

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.5.V10.MichErie



VISN 10: MichErie Market

Access ► New Patient Appointments (FY15-18), cont.

Percent of New Patient Appointments Completed within 30 Days

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655GG) Cadillac	97.4%	96.8%	96.9%	91.8%	86.6%	86.7%	83.8%	59.4%	80.2%	85.6%	82.7%	81.0%
(V10) (655GH) Cheboygan County	63.5%	98.3%	98.5%	92.2%	95.3%	97.9%	98.0%	97.2%	94.2%	91.8%	90.7%	72.7%
(V10) (655GI) Grayling	94.4%	81.7%	92.2%	93.0%	98.6%	98.8%	90.2%	66.9%	67.7%	90.8%	87.2%	86.8%
(V10) (655QB) Grand Traverse	N/A	94.4%	90.0%	92.5%	N/A	N/A	N/A	N/A	N/A	95.4%	77.1%	96.9%
National Average	90.1%	90.8%	91.2%	N/A	76.4%	73.2%	73.8%	N/A	75.2%	76.2%	76.3%	N/A

N/A: Not Available

Source: VSSC Completed Appointments Cube

8.5.V10.MichErie#2



VISN 10: MichErie Market — Ann Arbor-Michigan

Access ▶ **Average Wait Time for Top 10 Consults – Ann Arbor-Michigan**

Receiving Service Stop Code (Top 10 by FY18 Consults)	Receiving Facility	FY18 Consults	Average Days to Completed Consult
(307) GASTROENTEROLOGY	(V10) (506) Ann Arbor-Michigan	6,547	47.6
(303) CARDIOLOGY	(V10) (506) Ann Arbor-Michigan	5,901	41.2
(304) DERMATOLOGY	(V10) (506) Ann Arbor-Michigan	6,203	39.8
(421) VASCULAR LABORATORY	(V10) (506) Ann Arbor-Michigan	4,871	30.6
(205) PHYSICAL THERAPY	(V10) (506) Ann Arbor-Michigan	19,489	19.3
(403) OTOLARYNGOLOGY (ENT)	(V10) (506) Ann Arbor-Michigan	6,245	17.8
(502) MH CLINIC IND	(V10) (506) Ann Arbor-Michigan	5,989	15.4
(206) OCCUPATIONAL THERAPY	(V10) (506) Ann Arbor-Michigan	5,547	14.7
(180) DENTAL	(V10) (506) Ann Arbor-Michigan	5,268	3.9
(125) SOCIAL WORK SERVICE	(V10) (506) Ann Arbor-Michigan	3,373	3.7



VISN 10: MichErie Market — Battle Creek

Access ► Average Wait Time for Top 10 Consults – Battle Creek

Receiving Service Stop Code (Top 10 by FY18 Consults)	Receiving Facility	FY18 Consults	Average Days to Completed Consult
(321) GI ENDOSCOPY	(V10) (515) Battle Creek	1,645	80.6
(329) MEDICAL PROCEDURE UNIT	(V10) (515) Battle Creek	2,232	47.8
(411) PODIATRY	(V10) (515) Battle Creek	1,921	41.8
(201) PM&RS PHYSICIAN	(V10) (515) Battle Creek	1,798	28.7
(502) MH CLINIC IND	(V10) (515) Battle Creek	3,373	26.0
(205) PHYSICAL THERAPY	(V10) (515) Battle Creek	8,982	9.6
(206) OCCUPATIONAL THERAPY	(V10) (515) Battle Creek	2,689	8.5
(323) PRIMARY CARE/MEDICINE	(V10) (515) Battle Creek	4,138	7.3
(304) DERMATOLOGY	(V10) (515) Battle Creek	1,790	5.9
(160) CLINICAL PHARMACY	(V10) (515) Battle Creek	6,565	4.8



VISN 10: MichErie Market — Ann Arbor-Michigan

Access ► Longest Wait Time – Top 10 Consults

Receiving Service Stop Code	Receiving Facility	FY18 Consults	Average Days to Completed Consult (Top 10 Stop Codes)
(690) CVT PATIENT SITE	(V10) (506) Ann Arbor-Michigan	679	191.7
(301) GENERAL INTERNAL MEDICINE	(V10) (506) Ann Arbor-Michigan	5	152.7
(104) PULMONARY FUNCTION	(V10) (506) Ann Arbor-Michigan	608	138.0
(720) OTHER EDUCATION GROUP	(V10) (506) Ann Arbor-Michigan	18	110.6
(411) PODIATRY	(V10) (506) Ann Arbor-Michigan	432	102.0
(201) PM&RS PHYSICIAN	(V10) (506) Ann Arbor-Michigan	1,946	81.3
(319) GERIATRIC EVAL & MGMT (GEM)	(V10) (506) Ann Arbor-Michigan	3	76.0
(139) HEALTH AND WELL-BEING SERVICES	(V10) (506) Ann Arbor-Michigan	33	75.4
(314) RHEUMATOLOGY/ARTHRITIS	(V10) (506) Ann Arbor-Michigan	918	73.7
(330) CHEMOTHERAPY PROC. UNIT-MED.	(V10) (506) Ann Arbor-Michigan	49	68.7



VISN 10: MichErie Market — Battle Creek

Access ► Longest Wait Time – Top 10 Consults

Receiving Service Stop Code	Receiving Facility	FY18 Consults	Average Days to Completed Consult (Top 10 Stop Codes)
(150) COMPUTERIZED TOMOGRAPHY (CT)	(V10) (515) Battle Creek	444	121.5
(312) PULMONARY/CHEST	(V10) (515) Battle Creek	1	105.0
(321) GI ENDOSCOPY	(V10) (515) Battle Creek	1,645	80.6
(436) CHIROPRACTIC CARE	(V10) (515) Battle Creek	763	76.0
(303) CARDIOLOGY	(V10) (515) Battle Creek	867	67.6
(690) CVT PATIENT SITE	(V10) (515) Battle Creek	231	50.3
(538) PSYCH TESTING	(V10) (515) Battle Creek	496	49.5
(329) MEDICAL PROCEDURE UNIT	(V10) (515) Battle Creek	2,232	47.8
(212) EMG - ELECTROMYOGRAM	(V10) (515) Battle Creek	704	45.1
(420) PAIN CLINIC	(V10) (515) Battle Creek	1,335	44.6



VISN 10: MichErie Market — Ann Arbor-Michigan

Access ► Estimated Capacity for Outpatient Workload

Primary Care PACT Teams											
VA Facility	FY18 Total Uniques	FY18 Total Encounters	FY18 Actual Primary Care (PC) Encounters		Count of Primary Care PACT Teams	Number of Teams at or over Capacity	Number of Teams at or under Capacity	Team PCP Capacity Total	Capacity Left	Panel Fullness	3rd Next Available Appt.
			Primary Care Encounters	Uniques							
(V10) (506) Ann Arbor-Michigan	59,521	652,500	55,251	21,323	30	2	27	2,158	-494	123.0%	20.7
(V10) (506GA) Toledo	16,256	147,869	32,983	13,247	24	21	2	9,389	-1,461	116.0%	10.5
(V10) (506GB) Flint - (V10) Eastern Michigan	3,850	20,908	8,909	3,420	N/A	N/A	N/A	N/A	N/A	N/A	7.6
(V10) (506GC) Jackson-Michigan Center	4,140	20,364	9,784	3,669	N/A	N/A	N/A	N/A	N/A	N/A	4.6
(V10) (506QA) Ann Arbor-Packard Road	7,560	27,758	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (506QB) Green Road	7,667	12,938	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



VISN 10: MichErie Market — Battle Creek

Access ► Estimated Capacity for Outpatient Workload

Primary Care PACT Teams											
VA Facility	FY18 Total Uniques	FY18 Total Encounters	FY18 Actual Primary Care (PC) Encounters		Count of Primary Care PACT Teams	Number of Teams at or over Capacity	Number of Teams at or under Capacity	Team PCP Capacity Total	Capacity Left	Panel Fullness	3rd Next Available Appt.
			Primary Care Encounters	Uniques							
(V10) (515) Battle Creek	37,885	333,159	26,515	10,403	8	3	5	6,503	1,073	84.0%	10.7
(V10) (515BU) Battle Creek Domiciliary	756	22,520	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (515BY) Wyoming	22,650	210,516	31,739	14,398	4	0	4	4,181	1,074	74.0%	10.1
(V10) (515GA) Muskegon	5,128	40,469	12,382	4,531	2	0	2	2,500	1,161	54.0%	4.2
(V10) (515GB) Lansing South	4,574	29,722	11,040	3,999	2	0	2	2,500	644	74.0%	5.4
(V10) (515GC) Benton Harbor - (V10) Indiana	2,954	18,514	5,119	2,408	N/A	N/A	N/A	N/A	N/A	N/A	5.7
(V10) (515PA) Battle Creek PR RTP	62	580	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(V10) (515QA) Lansing North	582	6,992	439	126	N/A	N/A	N/A	N/A	N/A	N/A	3.0
(V10) (515QB) Century Avenue	877	7,702	399	127	N/A	N/A	N/A	N/A	N/A	N/A	5.3



VISN 10: MichErie Market — Ann Arbor-Michigan

Access ► **Estimated Capacity for Outpatient Workload, cont.**

Other Teams								
VA Facility	Tele Primary Care	HBPC	Women's Health	Geriatrics	Speciality	Academic	Other*	Total
(V10) (506) Ann Arbor-Michigan	N/A	1	46	3	N/A	10	N/A	60
(V10) (506GA) Toledo	N/A	1	3	N/A	N/A	N/A	N/A	4
(V10) (506GB) Flint - (V10) Eastern Michigan	N/A	N/A	4	N/A	N/A	N/A	N/A	4
(V10) (506GC) Jackson-Michigan Center	N/A	N/A	4	N/A	N/A	N/A	N/A	4

*Other includes Post Deployment and Homeless Teams

Source: VAAC PACT Compass Cube

8.15.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Access ► Estimated Capacity for Outpatient Workload, cont.

Other Teams								
VA Facility	Tele Primary Care	HBPC	Women's Health	Geriatrics	Speciality	Academic	Other*	Total
(V10) (515) Battle Creek	N/A	N/A	7	N/A	1	N/A	N/A	8
(V10) (515BY) Wyoming	N/A	N/A	15	N/A	N/A	N/A	1	16
(V10) (515GA) Muskegon	N/A	N/A	3	N/A	N/A	N/A	N/A	3
(V10) (515GB) Lansing South	N/A	N/A	4	N/A	N/A	N/A	1	5
(V10) (515GC) Benton Harbor - (V10) Indiana	N/A	N/A	3	N/A	N/A	N/A	N/A	3

*Other includes Post Deployment and Homeless Teams

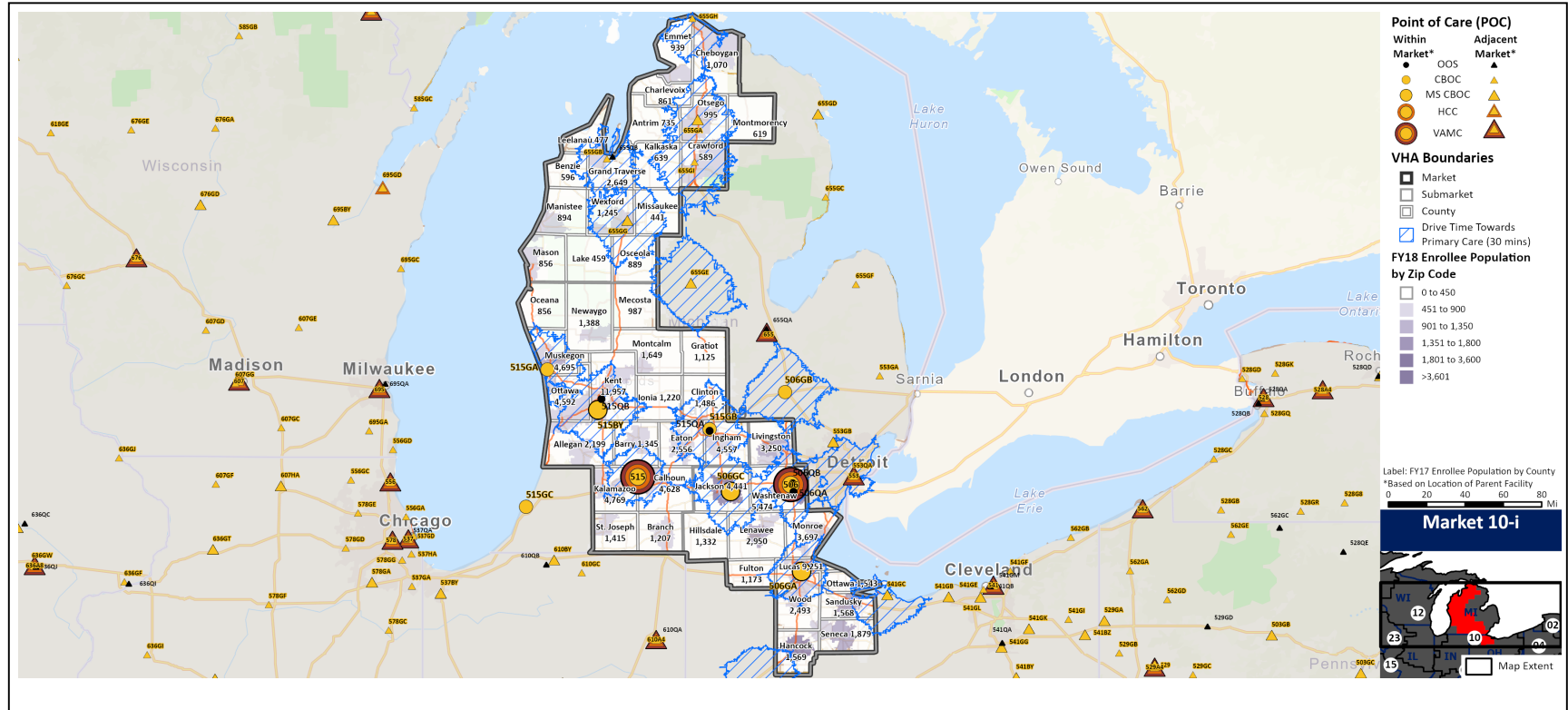
Source: VAAC PACT Compass Cube

8.15.V10.MichErie.515



VISN 10: MichErie Market

Access ► Estimated 30 Minute Drive Time Zones





VISN 10: MichErie Market

Access ► Clinic Utilization — Percent Slots Used of Total Slots

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506) Ann Arbor-Michigan	55.0%	54.0%	47.0%	45.0%	73.0%	75.0%	76.0%	78.0%	50.0%	51.0%	53.0%	51.0%
(V10) (506GA) Toledo	71.0%	67.0%	67.0%	71.0%	63.0%	60.0%	58.0%	57.0%	72.0%	72.0%	76.0%	83.0%
(V10) (506GB) Flint - (V10) Eastern Michigan	82.0%	81.0%	83.0%	85.0%	67.0%	65.0%	68.0%	69.0%	74.0%	69.0%	83.0%	88.0%
(V10) (506GC) Jackson-Michigan Center	49.0%	53.0%	55.0%	79.0%	54.0%	55.0%	60.0%	64.0%	88.0%	84.0%	87.0%	82.0%
(V10) (506QA) Ann Arbor-Packard Road	-	-	-	-	-	-	-	-	-	-	50.0%	29.0%
(V10) (506QB) Green Road	-	-	-	-	-	-	-	-	-	-	-	61.0%
(V10) (515) Battle Creek	56.0%	52.0%	48.0%	52.0%	69.0%	47.0%	49.0%	51.0%	75.0%	72.0%	72.0%	64.0%
(V10) (515BY) Wyoming	74.0%	71.0%	65.0%	62.0%	70.0%	53.0%	51.0%	49.0%	78.0%	70.0%	70.0%	67.0%
(V10) (515GA) Muskegon	63.0%	49.0%	56.0%	47.0%	60.0%	46.0%	49.0%	43.0%	52.0%	44.0%	27.0%	16.0%
(V10) (515GB) Lansing South	78.0%	81.0%	76.0%	55.0%	51.0%	47.0%	53.0%	54.0%	38.0%	37.0%	33.0%	30.0%
(V10) (515GC) Benton Harbor - (V10) Indiana	64.0%	50.0%	70.0%	66.0%	51.0%	49.0%	52.0%	55.0%	41.0%	38.0%	38.0%	35.0%
(V10) (515QA) Lansing North	-	-	-	-	-	-	33.0%	28.0%	-	-	-	-
(V10) (515QB) Century Avenue	-	-	-	-	-	-	37.0%	34.0%	-	-	-	-
(V10) (655GA) Gaylord	59.0%	61.0%	62.0%	63.0%	64.0%	56.0%	51.0%	51.0%	38.0%	40.0%	34.0%	28.0%
(V10) (655GB) Traverse City	70.0%	67.0%	45.0%	46.0%	64.0%	63.0%	48.0%	52.0%	82.0%	78.0%	30.0%	39.0%
(V10) (655GG) Cadillac	69.0%	64.0%	64.0%	75.0%	63.0%	65.0%	57.0%	74.0%	47.0%	60.0%	68.0%	74.0%
(V10) (655GH) Cheboygan County	80.0%	71.0%	68.0%	66.0%	48.0%	60.0%	48.0%	59.0%	38.0%	37.0%	36.0%	41.0%
(V10) (655GI) Grayling	82.0%	78.0%	70.0%	71.0%	42.0%	67.0%	52.0%	64.0%	54.0%	62.0%	51.0%	49.0%



VISN 10: MichErie Market

Access ► Clinic Utilization — Percent Slots Used of Total Slots, cont.

Facility	Mental Health				Primary Care				Specialty Care			
	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (655QB) Grand Traverse	-	66.0%	74.0%	71.0%	-	-	-	-	-	82.0%	80.0%	81.0%



VISN 10: MichErie Market

Access ► Cancelled by Clinic Report

	Mental Health				Primary Care				Specialty Care			
Facility	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18	FY15	FY16	FY17	FY18
(V10) (506) Ann Arbor-Michigan	4,379	3,885	4,083	3,326	3,585	2,918	4,136	3,814	14,513	14,174	16,304	12,141
(V10) (506GA) Toledo	1,272	1,046	1,121	751	3,498	2,166	2,964	2,137	2,030	1,890	2,113	1,932
(V10) (506GB) Flint - (V10) Eastern Michigan	667	601	1,057	725	556	545	846	771	80	64	106	43
(V10) (506GC) Jackson-Michigan Center	458	402	290	393	505	578	661	720	43	131	120	109
(V10) (506QA) Ann Arbor-Packard Road	N/A	N/A	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	128	384
(V10) (506QB) Green Road	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	26	141
(V10) (515) Battle Creek	3,439	2,957	2,559	2,501	2,414	2,621	2,889	2,941	5,159	3,892	4,572	4,094
(V10) (515BY) Wyoming	2,096	1,385	1,568	1,503	3,352	2,630	3,417	4,092	3,763	3,198	3,851	2,776
(V10) (515GA) Muskegon	519	315	639	517	1,071	929	1,176	1,378	96	36	85	39
(V10) (515GB) Lansing South	424	458	1,403	856	1,165	860	1,187	1,190	100	70	93	45
(V10) (515GC) Benton Harbor - (V10) Indiana	157	135	374	195	383	294	341	319	62	59	71	25
(V10) (515QA) Lansing North	N/A	N/A	N/A	N/A	N/A	N/A	29	40	N/A	N/A	N/A	N/A
(V10) (515QB) Century Avenue	N/A	N/A	N/A	N/A	N/A	N/A	29	41	N/A	N/A	N/A	N/A
(V10) (655GA) Gaylord	369	318	351	306	387	306	420	396	60	88	170	134
(V10) (655GB) Traverse City	558	214	43	35	620	422	472	409	492	288	62	61
(V10) (655GG) Cadillac	343	424	529	239	361	519	514	417	166	458	586	372
(V10) (655GH) Cheboygan County	207	165	198	157	194	176	415	281	36	39	59	60
(V10) (655GI) Grayling	192	273	316	307	227	300	319	269	84	93	123	122
(V10) (655QB) Grand Traverse	N/A	228	266	299	N/A	N/A	N/A	N/A	N/A	206	361	285
Total	15,080	12,806	14,799	12,110	18,318	15,264	19,815	19,215	26,684	24,686	28,830	22,763

Note: Appointments cancelled within 45 days

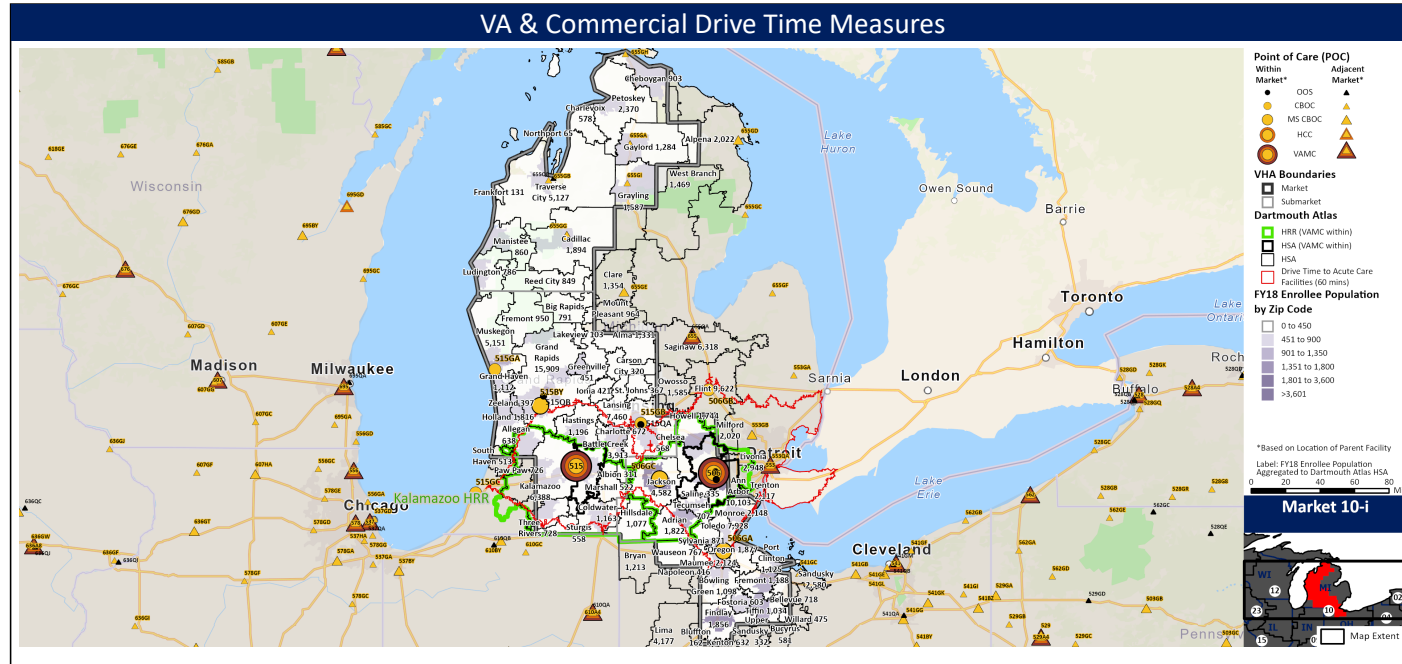
Source: VSSC No Show and Cancellation Cube

8.11.V10.MichErie



VISN 10: MichErie Market

Access ► Market/Parent Facility Existing VA Drive Times Assessment



Note: A Dartmouth Atlas Hospital Service Area (HSA) is a ZIP code-defined geography encompassing the community where the ZIP code's Medicare residents predominantly receive their hospital care. HSA total enrollees are displayed on map. A Dartmouth Atlas Hospital Referral Region (HRR) is a ZIP code-defined geography encompassing the community where the ZIP code's Medicare residents predominantly receive their cardiovascular and neurosurgery hospital care.

Source: 1. Dartmouth Atlas 2. Geocoded Enrollee File FY18Q4

8.12.V10.MichErie#IMG



VISN 10: MichErie Market

Access ► Drive Time Summary

FY 2018	# of Total Enrollees	Primary Care				Secondary Care			
		# of enrollees within 30 minutes drive time	% of enrollees within 30 minutes	# of enrollees outside 30 minutes drive time	% of enrollees outside 30 minutes	# of enrollees within 60 minutes drive time	% of enrollees within 60 minutes	# of enrollees outside 60 minutes drive time	% of enrollees outside 60 minutes
(V10) MichErie	114,094	74,846	65.6%	39,248	34.4%	77,423	67.9%	36,671	32.1%

Potential Service Gaps





VISN 10: MichErie Market

Access ► Potential Service Gaps, cont.

Potential service gaps are areas identified by the Dartmouth Atlas in a Hospital Service Area (HSA). The medical community in these areas provides opportunities to consider different tactics to extend the VA network of care. Strategies for expansion might include telehealth, FQHC partnership, unique rural outreach, contracted provider(s), or a new VA asset. The table below shows the number of Enrollees that reside within a particular HSA. Planning best practice suggests that 4,800 enrollees are required to justify establishing a new site of care.

Existing VA Point of Care	Potential Service Gaps	Enrollees	Existing VA Point of Care	Potential Service Gaps	Enrollees	Areas with VA Points of Care	Atlas HSA	Enrollees
No Current Facility Within 30 Minute Drive Time	Kalamazoo	6,111	No Current Facility	Frankfort	134	(V10) (655GG) Cadillac	Cadillac	2,005
	Petoskey	2,444	Within 30 Minute Drive Time	Lakeview	114	(V10) (655GH) Cheboygan Atlas HSA	Cheboygan	853
	Monroe	2,271		Northport	59	(V10) (655GI) Grayling	Grayling	1,661
	Fremont	2,012	Areas with VA Points of Care					
	Adrian	1,978	Atlas HSA		Enrollees			
	Holland	1,875						
	Findlay	1,651	(V10) (506) Ann Arbor-Michigan	Ann Arbor	9,667			
	Alma	1,509		Howell	1,489			
	Coldwater	1,230		Saline	345			
	Tiffin	1,185		Toledo	7,961			
	Bowling Green	1,064	(V10) (506GA) Toledo	Maumee	2,267			
	Hillsdale	1,023		Oregon	1,907			
	Hastings	981		Sylvania	955			
	Manistee	964	(V10) (506GC) Jackson-Michigan Center	Jackson	4,575			
	Reed City	936		Chelsea	548			
	Wauseon	881		Albion	337			
	Ludington	812	(V10) (515) Battle Creek	Battle Creek	4,209			
	Big Rapids	811	(V10) (515BY) Wyoming	Grand Rapids	16,737			
	Three Rivers	788		Zeeland	420			
	Tecumseh	766	(V10) (515GA) Muskegon	Muskegon	5,297			
	Fostoria	620		Grand Haven	1,180			
	Sturgis	617	(V10) (515GB) Lansing South	Lansing	7,881			
	Allegan	613		Charlotte	768			
	Charlevoix	597		St. Johns	432			
	Marshall	579	(V10) (541GC) Sandusky	Port Clinton	1,244			
	Greenville	493	(V10) (655GA) Gaylord	Gaylord	1,461			
	Ionia	412	(V10) (655GB) Traverse City	Traverse City	5,346			
	Carson City	356						



Quality & Satisfaction



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Feedback: Survey of Enrollees – MichErie Market

Category	Sub-Category	National	MichErie Market
Insurance (Reliance)	Have Private Insurance Plan	27.6 %	37.2 %
	Planned Use of VA as Primary Source of Care	40.5 %	42.0 %
	Uninsured	19.2 %	20.6 %
Satisfaction (Best Care Anywhere)	Appointments are Always/Nearly Always Easy to Get with VA	45.3 %	51.4 %
	Very Satisfied with Respect Given by Health Care Professionals	72.3 %	69.1 %
	Very Satisfied with the Ability to Get Referrals	32.4 %	47.1 %
Access (Choose VA)	Believes Care in the Community is Easier to Get to than VA (Answered Yes)	66.0 %	68.5 %
	Believes Care in the Community Quality is Better than VA (Answered Yes)	43.0 %	37.5 %
Internet Use (Telehealth Potential)	Internet Use to Look at Health Information (Answered Yes)	76.1 %	79.5 %
	Used Internet to Make Medical Appointments (Answered Yes)	36.5 %	22.4 %

1. Satisfaction denominator = enrolled Veterans who said they had used VA since January 1, 2016
2. Access denominator = enrolled Veterans who said they had used a provider other than VA for some or all of their care since January 1, 2016
3. The denominator for Internet Use = enrolled Veterans who said they used the internet at least occasionally



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Inpatient

	% Reported as Always										% Definitely Yes	% Strongly Agree	% 9 or 10	% Yes	
Facility	Survey Date	Care Coord.	Cleanliness of Hospital Evt.	Comm about Meds	Comm w/ Doctors	Comm w/ Nurses	Pain Mgmt.	Comm about Pain	Quietness Of Hospital Evt.	Hosp. Staff Responsiveness	Recommend Hospital	Care Transition	Hosp. Rating	Discharge Info	Shared Decision Making
(V10) (506) Ann Arbor-Michigan	2015	61.4	77.7	69.0	80.4	80.5	68.1	N/A	56.5	65.7	78.5	59.3	81.4	88.8	82.0
(V10) (506) Ann Arbor-Michigan	2016	58.8	76.8	68.3	76.6	78.4	64.7	N/A	54.0	68.0	78.3	54.7	75.7	89.5	81.2
(V10) (506) Ann Arbor-Michigan	2017	62.2	80.8	70.2	80.5	80.8	66.5	N/A	53.5	66.5	81.7	59.9	78.4	89.8	82.8
(V10) (506) Ann Arbor-Michigan	2018	62.5	77.1	71.2	82.2	81.9	N/A	67.4	54.0	68.6	83.5	61.0	79.7	91.3	83.7
(V10) (515) Battle Creek	2015	44.2	76.3	64.7	63.1	74.8	52.2	N/A	55.2	57.1	50.1	41.6	47.4	81.1	70.9
(V10) (515) Battle Creek	2016	38.3	75.0	54.9	59.1	72.3	46.2	N/A	58.2	61.7	54.4	49.2	57.9	80.5	63.1
(V10) (515) Battle Creek	2017	51.4	69.3	68.6	65.5	72.1	55.7	N/A	62.7	65.3	61.9	45.7	65.7	85.0	80.7
(V10) (515) Battle Creek	2018	58.9	80.5	69.9	75.2	80.0	N/A	57.0	66.7	62.2	68.1	56.4	66.1	85.1	73.0
VISN 10 Average	2015	51.5	70.5	60.9	72.9	73.0	60.7	N/A	51.6	57.6	64.6	49.3	65.8	86.4	74.1
VISN 10 Average	2016	53.4	72.9	63.1	74.1	74.4	59.8	N/A	53.7	60.3	66.8	51.2	67.4	88.2	75.6
VISN 10 Average	2017	53.4	73.5	63.3	75.6	76.0	60.6	N/A	52.5	59.5	68.3	51.9	67.8	87.8	75.8
VISN 10 Average	2018	54.5	71.8	65.5	75.4	76.6	N/A	59.1	52.8	60.4	70.1	52.7	69.6	88.3	76.7
National Average	2015	52.0	69.9	61.2	73.8	72.1	60.1	N/A	49.3	58.8	65.5	49.7	64.3	84.7	74.0
National Average	2016	53.2	70.0	61.9	74.7	73.1	60.1	N/A	49.8	59.7	65.8	50.8	65.2	85.3	75.3
National Average	2017	53.2	69.6	62.6	75.1	73.5	59.5	N/A	50.1	59.7	66.7	52.0	65.4	85.6	75.4
National Average	2018	54.2	70.4	63.4	75.7	74.6	N/A	57.9	51.4	61.0	66.9	51.9	66.2	86.2	75.5

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.2.V10.MichErie



VISN 10: MichErie Market — Ann Arbor-Michigan

Quality & Satisfaction ► VA Market Facility Trends – Access/Quality/Patient Satisfaction

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
Acute care mortality						
1. Acute care Standardized Mortality Ratio (SMR)	O/E	↓	0.738	0.698	0.740	0.822
2. Acute care 30-day Standardized Mortality Ratio (SMR30)	O/E	↓	0.906	0.793	0.835	0.923
a. AMI RSMR	%	↓	9.076	9.076	7.148	7.741
b. CHF RSMR	%	↓	7.492	7.492	7.198	6.843
c. Pneumonia RSMR	%	↓	7.599	7.599	9.648	9.351
d. COPD RSMR	%	↓			5.339	5.805
e. Stroke RSMR	%	↓			5.425	6.148
Avoidable adverse events						
1. In-hospital complications	O/E	↓	1.002	0.932	1.277	0.838
2. Healthcare associated infections (HAI)						
a. Catheter associated urinary tract infection	inf/1k device days	↓	0.358	1.828	0.749	0.467
b. Central line associated bloodstream infection	inf/1k device days	↓	1.283	0.394	0.802	0.364
c. Ventilator associated events (VAC PUs)	events/1k device days	↓	4.246	1.309	0.235	0
d. Methicillin-resistant Staphylococcus aureus (MRSA) infection	inf/1k bed days	↓	0.255	0.043	0.121	0.056
e. C. difficile infection	inf/10k bed days	↓			5.563	5.597
3. Patient safety indicator (PSI)	O/E	↓	0.575	0.510	-0.151	0.36
4. Post acute care events	O/E	↓			0.382	0.924
Length of Stay and Utilization Management						
1. Adjusted length of stay	days	↓	4.471	4.429	4.647	4.324
2. Utilization management						
a. Admission reviews met, adjusted	%	↑	81.306	78.837	79.282	76.042
b. Continued stay reviews met, adjusted	%	↑	79.419	76.619	76.635	67.607
Care Transition						
1. Ambulatory Care Sensitive Condition hospitalizations	hosp/1000 pts	↓	23.747	25.402	22.388	25.055
2. Hospital-wide 30-day readmission rate	%	↓	12.784	11.648	11.766	11.458
a. Cardiorespiratory cohort	%	↓	15.017	17.344	10.380	12.922
b. Cardiovascular cohort	%	↓	12.550	9.053	9.402	10.095
c. Medicine cohort	%	↓	13.037	13.051	13.671	12.825
d. Neurology cohort	%	↓	9.681	12.626	18.765	8.987
e. Surgical cohort	%	↓	10.340	7.248	8.141	8.482
3. Disease specific 30-day readmission rate						
a. AMI RSR	%	↓	15.477	15.477	17.005	16.753
b. CHF RSR	%	↓	17.360	17.360	17.089	18.794
c. Pneumonia RSR	%	↓	13.973	13.973	14.919	14.527
d. COPD RSR	%	↓			12.271	15.365
e. Stroke RSR	%	↓			10.907	10.046
Patient Experience						
1. Overall rating of hospital (inpatient)	wct %	↑	77.568	75.844	79.457	67.139
2. Overall rating of primary care providers	wct %	↑	74.587	75.931	75.424	70.75
3. Overall rating of specialty care providers	wct %	↑	68.531	67.043	72.728	69.166
4. Care Transition (inpatient)	wct %	↑			61.070	51.814
5. PCMH Stress Discussed (Q40)	wct %	↑			62.827	59.113



VISN 10: MichErie Market — Ann Arbor-Michigan

Quality & Satisfaction ► VA Market Facility Trends – Access/Quality/Patient Satisfaction, cont.

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
Employee Satisfaction						
1. Best places to work	score (1-100)	↑	60.046	61.060	61.917	65.152
a. Overall job satisfaction	score (1-5)	↑	3.563	3.724	3.684	3.82
b. Satisfaction with organization	score (1-5)	↑	3.442	3.486	3.513	3.616
c. Recommend my organization as a good place to work	score (1-5)	↑	3.694	3.631	3.784	3.833
2. Registered nurse turnover rate	%	↓	9.154	4.697	8.067	5.163
Performance measures						
1. Inpatient performance measures (ORYX)	%	↑	84.079	88.898	86.759	83.07
2. Outpatient performance measures (HED90_1)	wct %	↑			87.218	88.767
3. Outpatient performance measures (HED90_ec)	%	↑			79.108	78.367
Access						
1. PCMH / Specialty Care Access questions						
a. PCMH timely appointment, care and information	wct %	↑	55.299	48.026	51.229	53.032
b. Specialty Care timely appointment, care and information	wct %	↑		44.508	50.838	50.83
c. Days Waited for Urgent Appointment (PCMH)	wct %	↑	47.115	28.985	36.185	40.916
c. Get an urgent care appointment as soon as needed (SC)			46.115			
d. Get a routine care appointment as soon as needed (SC)			52.854			
2. Wait times						
a. Primary care new patient wait time <=30 days from create date	%	↑	97.907	97.511	66.541	80.444
b. Specialty care new patient wait time <=30 days from create date	%	↑	84.045	79.719	59.501	75.419
c. Mental health care new patient wait time <=30 days from create date	%	↑	99.538	99.370	90.826	92.311
3. Call center responsiveness						
a. Call center speed in responding to calls in seconds	seconds	↓	60.514	127.128	173.238	50.698
b. Call center abandonment rate	%	↓	4.134	8.668	9.012	6.704
Mental Health						
1. Population coverage	Standardized score	↑	0.477	-0.110	-0.214	0.326
2. Continuity of care	Standardized score	↑	-0.308	-0.306	-0.468	-0.248
3. Experience of care	Standardized score	↑	0.484	0.464	0.805	0.855
3. Experience of care	Standardized score	↑	0.868	-0.399	-0.807	0.066
Efficiency and Capacity						
1. Efficiency (1/SFA)	Score (0-100)	↑	95.595	96.238	95.548	94.096
2. Physician Capacity	%	↓		1.133	1.353	7.505

VAMC FY18 Star Rating: 3

Ann Arbor VAMC Summary for all 3 Quarters		
Above Highest Benchmark of 10th or 90th Percentile	Superior	14 9%
Between Median and Favorable Percentile	Good	63 42%
Between Median and Unfavorable Percentile	Acceptable	69 46%
Below Lowest Benchmark of 10th or 90th Percentile	Needs Improvement	5 3%
Total		151 100%

Note: Performance Measures cited above represent composite measures. Some measures have changed, but appear to be relatively close to current measures and therefore are reported for periods shown (PCMH Timely Appointments, Days Waited for Urgent Appointment).



VISN 10: MichErie Market — Battle Creek

Quality & Satisfaction ► VA Market Facility Trends – Access/Quality/Patient Satisfaction

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
Acute care mortality						
1. Acute care Standardized Mortality Ratio (SMR)	O/E	↓	0.219	0.405	0.470	0.822
2. Acute care 30-day Standardized Mortality Ratio (SMR30)	O/E	↓	1.021	1.349	1.421	0.923
a. AMI RSMR	%	↓				7.741
b. CHF RSMR	%	↓	7.029	7.029	6.718	6.843
c. Pneumonia RSMR	%	↓	9.197	9.197	10.175	9.351
d. COPD RSMR	%	↓			6.151	5.805
e. Stroke RSMR	%	↓				6.148
Avoidable adverse events						
1. In-hospital complications	O/E	↓	0.000	1.363	0.689	0.838
2. Healthcare associated infections (HAI)						
a. Catheter associated urinary tract infection	inf/1k device days	↓	0.000	0.350	0.000	0.467
b. Central line associated bloodstream infection	inf/1k device days	↓	0.000	0.000	0.000	0.364
c. Ventilator associated events (VAC Pius)	events/1k device days	↓				0
d. Methicillin-resistant Staphylococcus aureus (MRSA) infection	inf/1k bed days	↓	0.350	0.000	0.000	0.056
e. C. difficile infection	inf/10k bed days	↓			0.000	5.597
3. Patient safety indicator (PSI)	O/E	↓	0.825	1.041	1.077	0.36
4. Post acute care events	O/E	↓				0.924
Length of Stay and Utilization Management						
1. Adjusted length of stay	days	↓	4.181	4.048	3.804	4.324
2. Utilization management						
a. Admission reviews met, adjusted	%	↑	64.844	66.244	73.537	76.042
b. Continued stay reviews met, adjusted	%	↑	40.719	41.726	48.000	67.607
Care Transition						
1. Ambulatory Care Sensitive Condition hospitalizations	hosp/1000 pts	↓	24.514	22.368	21.276	25.055
2. Hospital-wide 30-day readmission rate	%	↓	9.451	7.131	7.121	11.458
a. Cardiorespiratory cohort	%	↓	10.148	6.019	0.000	12.922
b. Cardiovascular cohort	%	↓	0.000	0.000	0.000	10.095
c. Medicine cohort	%	↓	10.441	8.171	6.111	12.825
d. Neurology cohort	%	↓	0.000	0.000	0.000	8.987
e. Surgical cohort	%	↓				8.482
3. Disease specific 30-day readmission rate						
a. AMI RSRR	%	↓				16.753
b. CHF RSRR	%	↓	18.237	18.237	16.721	18.794
c. Pneumonia RSRR	%	↓	13.841	13.841	12.435	14.527
d. COPD RSRR	%	↓			13.651	15.365
e. Stroke RSRR	%	↓				10.046
Patient Experience						
1. Overall rating of hospital (inpatient)	wct %	↑	54.491	63.089	68.856	67.139
2. Overall rating of primary care providers	wct %	↑	64.768	65.461	64.347	70.75
3. Overall rating of specialty care providers	wct %	↑	57.936	64.170	62.624	69.166
4. Care Transition (inpatient)	wct %	↑			48.587	51.814
5. PCMH Stress Discussed (Q40)	wct %	↑			57.528	59.113



VISN 10: MichErie Market — Battle Creek

Quality & Satisfaction ► VA Market Facility Trends – Access/Quality/Patient Satisfaction, cont.

Measure	Measure Unit	Preferred Direction	16Q3	17Q3	18Q3	18Q3 Median
Employee Satisfaction						
1. Best places to work	score (1-100)	↑	62.634	65.646	64.290	65.152
a. Overall job satisfaction	score (1-5)	↑	3.719	3.813	3.803	3.82
b. Satisfaction with organization	score (1-5)	↑	3.526	3.666	3.597	3.616
c. Recommend my organization as a good place to work	score (1-5)	↑	3.810	3.809	3.830	3.833
2. Registered nurse turnover rate	%	↓	7.980	4.599	6.008	5.163
Performance measures						
1. Inpatient performance measures (ORYX)	%	↑	84.711	88.271	85.031	83.07
2. Outpatient performance measures (HED90_1)	wct %	↑			88.065	88.767
3. Outpatient performance measures (HED90_ec)	%	↑			80.137	78.367
Access						
1. PCMH / Specialty Care Access questions						
a. PCMH timely appointment, care and information	wct %	↑	56.460	49.762	46.396	53.032
b. Specialty Care timely appointment, care and information	wct %	↑		50.159	48.687	50.83
c. Days Waited for Urgent Appointment (PCMH)	wct %	↑	43.430	37.853	37.840	40.916
c. Get an urgent care appointment as soon as needed (SC)			42.770			
d. Get a routine care appointment as soon as needed (SC)			51.033			
2. Wait times						
a. Primary care new patient wait time <=30 days from create date	%	↑	98.436	99.661	83.418	80.444
b. Specialty care new patient wait time <=30 days from create date	%	↑	92.695	94.949	74.448	75.419
c. Mental health care new patient wait time <=30 days from create date	%	↑	99.677	99.472	94.253	92.311
3. Call center responsiveness						
a. Call center speed in responding to calls in seconds	seconds	↓	165.054	73.529	109.511	50.698
b. Call center abandonment rate	%	↓	10.101	5.975	8.922	6.704
Mental Health						
1. Population coverage	Standardized score	↑	0.765	-0.292	0.348	0.326
2. Continuity of care	Standardized score	↑	1.160	0.421	-0.187	-0.248
3. Experience of care	Standardized score	↑	0.053	-0.426	0.680	0.855
			0.463	-0.633	0.275	0.066
Efficiency and Capacity						
1. Efficiency (1/SFA)	Score (0-100)	↑	92.691	95.758	96.899	94.096
2. Physician Capacity	%	↓		6.528	11.053	7.505

VAMC FY18 Star Rating: 2

Battle Creek VAMC Summary for all 3 Quarters			
Above Highest Benchmark of 10th or 90th Percentile	Superior	30	22%
Between Median and Favorable Percentile	Good	48	35%
Between Median and Unfavorable Percentile	Acceptable	46	34%
Below Lowest Benchmark of 10th or 90th Percentile	Needs Improvement	12	9%
Total		136	100%

Note: Performance Measures cited above represent composite measures. Some measures have changed, but appear to be relatively close to current measures and therefore are reported for periods shown (PCMH Timely Appointments, Days Waited for Urgent Appointment).



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH)

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (506) Ann Arbor-Michigan	2015	43.0	N/A	82.8	73.1	78.0	N/A
(V10) (506) Ann Arbor-Michigan	2016	52.0	68.1	85.0	75.5	79.8	N/A
(V10) (506) Ann Arbor-Michigan	2017	50.7	68.9	87.1	73.9	82.7	N/A
(V10) (506) Ann Arbor-Michigan	2018	54.3	70.7	86.8	72.5	82.6	83.1
(V10) (506GA) Toledo	2015	43.4	N/A	75.0	73.7	72.8	N/A
(V10) (506GA) Toledo	2016	50.4	55.9	75.0	71.8	70.4	N/A
(V10) (506GA) Toledo	2017	45.0	57.9	73.2	69.9	68.4	N/A
(V10) (506GA) Toledo	2018	52.3	55.7	74.9	72.1	70.7	83.1
(V10) (506GB) Flint - (V10) Easter...	2015	25.7	N/A	64.1	67.0	52.8	N/A
(V10) (506GB) Flint - (V10) Easter...	2016	29.9	49.9	65.5	61.6	58.6	N/A
(V10) (506GB) Flint - (V10) Easter...	2017	40.0	52.5	69.5	76.9	59.5	N/A
(V10) (506GB) Flint - (V10) Easter...	2018	39.5	52.8	71.5	77.9	57.0	74.8
(V10) (506GC) Jackson-Michigan ...	2015	35.1	N/A	76.3	80.5	76.0	N/A
(V10) (506GC) Jackson-Michigan ...	2016	56.1	68.4	84.3	77.2	75.8	N/A
(V10) (506GC) Jackson-Michigan ...	2017	50.4	62.3	78.7	80.4	73.0	N/A
(V10) (506GC) Jackson-Michigan ...	2018	55.6	62.7	78.6	80.7	71.6	83.9
(V10) (515) Battle Creek	2015	45.3	N/A	67.6	71.3	62.3	N/A
(V10) (515) Battle Creek	2016	44.6	48.5	71.9	75.3	60.5	N/A
(V10) (515) Battle Creek	2017	51.1	54.5	71.3	82.1	63.9	N/A
(V10) (515) Battle Creek	2018	44.8	52.1	73.9	77.6	67.2	74.5

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.MichErie



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH), cont.

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (515BY) Wyoming	2015	29.3	N/A	72.0	64.1	66.9	N/A
(V10) (515BY) Wyoming	2016	47.8	57.8	78.3	67.2	73.2	N/A
(V10) (515BY) Wyoming	2017	47.2	56.0	76.0	67.5	66.9	N/A
(V10) (515BY) Wyoming	2018	47.9	57.8	78.1	70.9	68.3	79.1
(V10) (515GA) Muskegon	2015	24.5	N/A	60.8	58.5	54.3	N/A
(V10) (515GA) Muskegon	2016	39.0	43.5	60.0	64.2	49.4	N/A
(V10) (515GA) Muskegon	2017	45.0	49.4	66.2	75.4	59.1	N/A
(V10) (515GA) Muskegon	2018	46.8	54.3	67.2	72.8	55.0	75.4
(V10) (515GB) Lansing South	2015	25.8	N/A	64.2	59.2	60.2	N/A
(V10) (515GB) Lansing South	2016	50.9	52.7	76.4	67.7	58.6	N/A
(V10) (515GB) Lansing South	2017	49.6	53.4	74.2	68.8	66.0	N/A
(V10) (515GB) Lansing South	2018	59.7	61.5	82.4	74.4	76.9	83.2
(V10) (515GC) Benton Harbor - (V...	2015	29.6	N/A	54.9	52.9	55.0	N/A
(V10) (515GC) Benton Harbor - (V...	2016	57.5	65.9	79.1	69.1	63.0	N/A
(V10) (515GC) Benton Harbor - (V...	2017	51.3	58.4	68.9	70.3	63.3	N/A
(V10) (515GC) Benton Harbor - (V...	2018	46.0	52.5	65.3	62.6	53.9	73.4
(V10) (655GA) Gaylord	2015	37.7	N/A	75.9	84.8	68.7	N/A
(V10) (655GA) Gaylord	2016	59.2	65.4	80.6	79.3	76.4	N/A
(V10) (655GA) Gaylord	2017	49.2	57.6	77.3	69.2	63.7	N/A
(V10) (655GA) Gaylord	2018	53.6	66.3	78.3	79.7	70.5	77.1

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.MichErie#2



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH), cont.

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (655GB) Traverse City	2015	36.5	N/A	69.2	77.3	65.0	N/A
(V10) (655GB) Traverse City	2016	53.3	63.6	78.3	77.6	74.4	N/A
(V10) (655GB) Traverse City	2017	55.2	66.6	78.4	78.6	68.1	N/A
(V10) (655GB) Traverse City	2018	56.7	64.9	75.7	79.1	63.2	83.4
(V10) (655GG) Cadillac	2015	42.6	N/A	69.3	79.5	62.7	N/A
(V10) (655GG) Cadillac	2016	59.9	65.0	78.5	76.6	73.8	N/A
(V10) (655GG) Cadillac	2017	51.2	62.9	73.8	77.2	70.2	N/A
(V10) (655GG) Cadillac	2018	48.4	58.8	73.3	74.9	67.6	83.3
(V10) (655GH) Cheboygan County	2015	43.5	N/A	64.5	73.9	54.2	N/A
(V10) (655GH) Cheboygan County	2016	58.5	58.3	74.6	83.5	62.8	N/A
(V10) (655GH) Cheboygan County	2017	62.5	56.7	77.2	84.2	74.3	N/A
(V10) (655GH) Cheboygan County	2018	57.0	55.5	73.6	76.5	62.7	81.5
(V10) (655GI) Grayling	2015	49.8	N/A	83.0	87.8	76.8	N/A
(V10) (655GI) Grayling	2016	63.8	69.1	84.4	84.4	75.9	N/A
(V10) (655GI) Grayling	2017	60.0	70.0	85.8	82.1	85.3	N/A
(V10) (655GI) Grayling	2018	51.5	70.5	84.4	83.6	80.2	89.6
VISN 10 Average	2015	38.6	N/A	71.6	67.9	66.4	N/A
VISN 10 Average	2016	51.3	59.7	76.8	72.0	69.7	N/A
VISN 10 Average	2017	50.8	60.3	76.9	73.1	71.1	N/A
VISN 10 Average	2018	52.4	60.9	78.4	73.1	70.9	82.9

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.MichErie#3



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (PCMH), cont.

Facility	% Always					% 9 or 10	
	Survey Date	Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
National Average	2015	37.4	N/A	70.9	66.2	65.2	N/A
National Average	2016	49.2	58.4	75.6	69.1	68.1	N/A
National Average	2017	49.8	58.7	75.8	70.0	68.9	N/A
National Average	2018	51.3	60.1	77.1	71.0	69.7	80.3

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.4.V10.MichErie#4



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (Specialty Care)

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (506) Ann Arbor	2016	48.7%	57.4%	74.1%	74.0%	69.2%	N/A
(V10) (506) Ann Arbor	2017	45.8%	57.6%	75.2%	75.1%	69.0%	N/A
(V10) (506) Ann Arbor	2018	51.3%	60.0%	77.0%	74.9%	73.6%	87.3%
(V10) (506GA) Toledo	2016	47.0%	50.9%	74.8%	73.0%	65.0%	N/A
(V10) (506GA) Toledo	2017	43.4%	50.8%	73.7%	77.7%	65.2%	N/A
(V10) (506GA) Toledo	2018	49.3%	60.5%	80.6%	76.2%	76.1%	88.3%
(V10) (506GB) Flint - (V10) Easter...	2016	61.7%	58.2%	79.9%	86.7%	72.1%	N/A
(V10) (506GB) Flint - (V10) Easter...	2017	21.8%	29.1%	48.9%	63.8%	37.0%	N/A
(V10) (506GB) Flint - (V10) Easter...	2018	N/A	69.1%	65.2%	46.4%	N/A	100.0%
(V10) (506GC) Jackson-Michigan ...	2016	2.8%	67.3%	59.1%	66.3%	16.3%	N/A
(V10) (506GC) Jackson-Michigan ...	2017	97.2%	77.3%	93.2%	89.4%	76.9%	N/A
(V10) (506GC) Jackson-Michigan ...	2018	51.9%	72.0%	91.9%	92.6%	94.4%	89.9%
(V10) (515) Battle Creek	2016	48.6%	52.0%	72.9%	79.9%	64.5%	N/A
(V10) (515) Battle Creek	2017	51.5%	51.4%	74.4%	76.1%	65.2%	N/A
(V10) (515) Battle Creek	2018	48.8%	50.1%	71.9%	73.9%	65.2%	74.6%
(V10) (515BY) Wyoming	2016	45.8%	53.0%	72.0%	67.5%	62.5%	N/A
(V10) (515BY) Wyoming	2017	48.2%	56.8%	76.1%	76.5%	68.8%	N/A
(V10) (515BY) Wyoming	2018	43.4%	56.3%	71.6%	73.3%	67.5%	77.6%
(V10) (515GA) Muskegon	2016	69.8%	63.5%	63.1%	79.9%	63.1%	N/A
(V10) (515GA) Muskegon	2017	40.2%	53.2%	28.5%	97.4%	10.9%	N/A

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.5.V10.MichErie



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (Specialty Care), cont.

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (515GA) Muskegon	2018	54.8%	53.5%	72.7%	78.5%	46.2%	63.1%
(V10) (515GB) Lansing South	2016	46.5%	56.6%	62.3%	86.0%	60.5%	N/A
(V10) (515GB) Lansing South	2017	19.2%	33.7%	52.3%	41.6%	43.5%	N/A
(V10) (515GB) Lansing South	2018	3.1%	25.1%	77.0%	23.4%	34.2%	63.7%
(V10) (515GC) Benton Harbor - (V...	2016	8.6%	32.4%	50.4%	18.5%	N/A	N/A
(V10) (515GC) Benton Harbor - (V...	2017	45.0%	25.5%	49.6%	54.4%	54.3%	N/A
(V10) (515GC) Benton Harbor - (V...	2018	66.2%	45.4%	92.6%	41.0%	50.2%	50.2%
(V10) (655GA) Gaylord	2016	44.1%	52.0%	59.4%	70.3%	58.2%	N/A
(V10) (655GA) Gaylord	2017	64.2%	66.2%	86.8%	85.2%	90.8%	N/A
(V10) (655GA) Gaylord	2018	48.2%	68.2%	90.6%	64.7%	67.5%	85.5%
(V10) (655GB) Traverse City	2016	55.3%	59.7%	65.4%	85.2%	67.0%	N/A
(V10) (655GB) Traverse City	2017	88.9%	72.2%	100.0%	100.0%	80.3%	N/A
(V10) (655GB) Traverse City	2018	78.6%	63.4%	66.3%	95.9%	76.5%	96.2%
(V10) (655GG) Cadillac	2016	36.3%	62.8%	78.3%	84.9%	76.3%	N/A
(V10) (655GG) Cadillac	2017	60.3%	57.3%	83.3%	82.2%	75.9%	N/A
(V10) (655GG) Cadillac	2018	41.4%	48.6%	69.0%	80.5%	65.4%	80.2%
(V10) (655GH) Cheboygan Count...	2016	50.0%	66.7%	97.7%	100.0%	100.0%	N/A
(V10) (655GH) Cheboygan Count...	2017	83.5%	56.8%	81.4%	83.8%	74.1%	N/A
(V10) (655GH) Cheboygan Count...	2018	56.9%	70.7%	73.5%	81.6%	65.8%	65.8%
(V10) (655GI) Grayling	2016	72.4%	85.1%	93.6%	88.4%	70.9%	N/A

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.5.V10.MichErie#2



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Outpatient (Specialty Care), cont.

Facility	Survey Date	% Always				% 9 or 10	
		Access	Care Coordination	Communication	Office Staff	Overall Rating of Provider	Overall Satisfaction
(V10) (655GI) Grayling	2017	39.2%	53.9%	73.0%	88.4%	70.7%	N/A
(V10) (655GI) Grayling	2018	81.1%	75.9%	84.0%	94.1%	71.6%	86.8%
VISN 10 Average	2016	46.7%	54.8%	73.2%	71.0%	64.9%	N/A
VISN 10 Average	2017	49.9%	57.5%	75.3%	72.4%	68.6%	N/A
VISN 10 Average	2018	49.4%	58.8%	76.0%	73.3%	69.5%	83.2%
National Average	2016	47.3%	55.1%	73.2%	69.1%	65.4%	N/A
National Average	2017	48.7%	56.2%	74.2%	70.4%	66.8%	N/A
National Average	2018	49.7%	57.1%	75.3%	71.7%	68.4%	81.0%

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.5.V10.MichErie#3



VISN 10: MichErie Market

Quality & Satisfaction ► VA Patient Satisfaction – Community Care

		% 9 or 10	% Always								% Strongly Agree		% Very Satisfied or Satisfied
Facility	Survey Date	Provider Rating	Community Care Received	Communication	Provider Aware History	Provider Informed	VA Provider Informed	Next Step Clear	Test Follow-up	Test Result to VA	First Appt. Soon as Needed	First Appt. Easy to Get	Overall Satisfaction
(V10) (506) Ann Arbor-Michigan	2016	73.4	66.4	79.8	65.6	51.5	49.4	50.6	59.5	69.6	60.1	53.5	84.4
(V10) (506) Ann Arbor-Michigan	2017	69.1	70.6	70.2	60.8	44.9	49.9	50.2	59.0	53.8	68.2	65.0	79.8
(V10) (506) Ann Arbor-Michigan	2018	74.5	58.5	76.9	62.3	44.1	50.5	54.3	45.6	71.6	71.6	68.1	88.1
(V10) (515) Battle Creek	2016	48.5	56.4	76.9	54.4	39.6	35.0	53.7	80.5	56.1	82.7	71.7	76.1
(V10) (515) Battle Creek	2017	64.0	62.5	65.3	50.3	47.6	45.7	44.9	50.0	58.3	63.3	64.5	76.6
(V10) (515) Battle Creek	2018	64.8	61.2	70.8	49.5	45.8	41.0	45.7	47.4	59.0	67.1	71.2	72.8
VISN 10 Average	2016	65.8	58.1	67.0	54.2	52.3	51.3	51.4	59.5	61.3	68.4	68.7	77.4
VISN 10 Average	2017	66.4	59.4	67.5	53.0	48.3	47.1	48.3	56.8	63.6	62.5	62.6	76.1
VISN 10 Average	2018	66.5	58.6	68.4	51.6	47.0	46.3	48.3	52.5	69.2	64.6	65.7	79.9
National Average	2016	58.8	50.4	63.7	47.0	42.2	41.0	42.7	51.6	59.6	59.9	59.8	71.7
National Average	2017	62.1	54.2	66.4	49.2	44.5	43.7	45.2	53.4	60.6	62.1	62.2	74.0
National Average	2018	64.5	55.3	68.0	51.0	45.7	44.8	47.0	54.9	62.5	66.0	66.1	76.9

Note: Green cells indicate a score at or above national average. Red cells indicate a score below national average.

Source: VSSC Patient Experiences Survey Reports

9.12.V10.MichErie



VISN 10: MichErie Market — Ann Arbor-Michigan

Quality & Satisfaction ► Quality of Community Hospitals – Ann Arbor-Michigan Area

	ST JOSEPH MERCY CHelsea	PROVIDENCE - PROVIDENCE PARK HOSPITAL	MERCY ST ANNE HOSPITAL	ST JOSEPH MERCY HOSPITAL	BEAUMONT HOSPITAL, GROSSE POINTE	UNIVERSITY OF MICHIGAN HEALTH SYSTEM	TOLEDO HOSPITAL THE	BEAUMONT HOSPITAL, TROY	FLOWER HOSPITAL	HENRY FORD WEST BLOOMFIELD HOSPITAL
Quality Rank for Overall Quality	1	2	3	4	5	6	7	8	9	10
Hospital Type	Acute	Acute	Acute	Acute	Acute	Acute	Acute	Acute	Acute	Acute
ACS - Trauma Center	No	Level II	No	Level I	Level III	No	Level I	Level II	No	Level III
Academic Medical Center	No	No	No	No	No	Yes	No	No	No	No
Quality Rank in the U.S. for Overall Quality	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%	Best 20%
CMS Hospital Star Rating	5	4	5	3	4	5	5	5	3	5
Truven Everest Award	No	No	No	Yes	No	No	No	No	No	No
Truven 100 Top Hospitals	No	Yes	No	No	No	No	No	No	No	No
Leapfrog Top Hospitals	No	No	No	No	No	No	No	No	No	Yes
US News & World Report Top Hospitals	No	No	No	No	No	Yes	No	Yes	No	No
Patients who gave their hospital a rating of 9 or 10 on a scale	89.0%	74.0%	79.0%	81.0%	78.0%	79.0%	69.0%	75.0%	74.0%	83.0%
Estimated Inpatient Surgeries	1,453	9,399	1,531	7,648	2,576	20,295	10,557	8,184	1,831	2,981
Estimated Outpatient Surgeries	6,043	13,752	3,666	14,233	4,483	32,994	14,975	13,624	5,458	6,587
ED Visits	19,118	124,183	49,726	87,431	39,552	105,651	103,003	108,143	33,128	43,283
Mortality Rate (AMI)	0.0%	11.4%	13.7%	10.8%	11.4%	10.3%	12.0%	11.7%	10.7%	12.7%
Mortality Rate (CHF)	12.1%	8.9%	9.0%	9.6%	7.9%	9.1%	10.3%	8.5%	11.5%	9.9%
Mortality Rate (Pneumonia)	14.0%	12.9%	13.4%	14.0%	12.4%	11.3%	13.8%	12.4%	16.6%	12.5%
Mortality Rate (COPD)	7.4%	5.7%	7.3%	6.6%	6.7%	6.8%	8.3%	7.2%	7.3%	7.7%
All Cause Hospital-Wide Readmission Rate	14.5%	15.4%	14.9%	15.0%	16.4%	15.3%	14.3%	16.0%	15.1%	14.9%
Readmission Rate (AMI)	0.0%	11.4%	13.7%	10.8%	11.4%	10.3%	12.0%	11.7%	10.7%	12.7%
Readmission Rate (CHF)	12.1%	8.9%	9.0%	9.6%	7.9%	9.1%	10.3%	8.5%	11.5%	9.9%
Readmission Rate (Pneumonia)	14.0%	12.9%	13.4%	14.0%	12.4%	11.3%	13.8%	12.4%	16.6%	12.5%
Readmission Rate (COPD)	7.4%	5.7%	7.3%	6.6%	6.7%	6.8%	8.3%	7.2%	7.3%	7.7%

Note: Data is reported by provider number and may include multi-campus hospitals reporting under a single provider number, N/A = Not Applicable

Sources: 1. Best Care Report 2. Definitive Healthcare

9.6.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Quality & Satisfaction ► Quality of Community Hospitals – Battle Creek Area

	OAKLAWN HOSPITAL	ALLEGAN GENERAL HOSPITAL	BRONSON LAKEVIEW HOSPITAL	HENRY FORD ALLEGIANCE HEALTH	SPECTRUM HEALTH PENNOCK	HAYES GREEN BEACH MEMORIAL HOSPITAL	BRONSON BATTLE CREEK HOSPITAL	THREE RIVERS HEALTH	BRONSON METHODIST HOSPITAL	PROMEDICA COLDWATER REGIONAL HOSPITAL
Quality Rank for Overall Quality	1	2	3	4	5	6	7	8	9	10
Hospital Type	Acute	CAH	CAH	Acute	Acute	CAH	Acute	Acute	Acute	Acute
ACS - Trauma Center	No	No	No	Level II	No	No	No	No	Level I	No
Academic Medical Center	No	No	No	No	No	No	No	No	Yes	No
Quality Rank in the U.S. for Overall Quality	Best 20%	Best 20%	Best 20%	21-40%	21-40%	21-40%	41-60%	41-60%	41-60%	61-80%
CMS Hospital Star Rating	4	4	4	4	4	3	4	3	4	3
Truven Everest Award	No	No	No	No	No	No	No	No	No	No
Truven 100 Top Hospitals	No	No	No	No	No	No	No	No	No	No
Leapfrog Top Hospitals	No	No	No	No	No	No	No	No	No	No
US News & World Report Top Hospitals	No	No	No	No	No	No	No	No	No	No
Patients who gave their hospital a rating of 9 or 10 on a scale	77.0%	76.0%	81.0%	65.0%	76.0%	80.0%	69.0%	74.0%	81.0%	67.0%
Estimated Inpatient Surgeries	706	242	114	3,647	794	87	1,994	225	7,378	869
Estimated Outpatient Surgeries	2,517	1,933	2,361	6,787	2,777	1,126	4,445	1,231	17,138	4,023
ED Visits	36,197	12,985	20,409	81,036	18,649	12,289	51,124	28,428	102,071	26,320
Mortality Rate (AMI)	0.0%	0.0%	0.0%	11.3%	0.0%	0.0%	16.3%	0.0%	14.8%	15.9%
Mortality Rate (CHF)	10.5%	12.2%	11.6%	9.7%	13.8%	13.0%	13.4%	12.8%	14.3%	13.5%
Mortality Rate (Pneumonia)	14.2%	13.6%	14.2%	15.6%	13.7%	14.0%	17.7%	17.8%	17.7%	16.1%
Mortality Rate (COPD)	7.2%	8.5%	8.9%	6.8%	8.7%	9.5%	6.8%	8.6%	8.9%	9.0%
All Cause Hospital-Wide Readmission Rate	14.3%	14.9%	15.2%	15.5%	14.9%	15.9%	14.4%	14.8%	13.6%	15.4%
Readmission Rate (AMI)	0.0%	0.0%	0.0%	11.3%	0.0%	0.0%	16.3%	0.0%	14.8%	15.9%
Readmission Rate (CHF)	10.5%	12.2%	11.6%	9.7%	13.8%	13.0%	13.4%	12.8%	14.3%	13.5%
Readmission Rate (Pneumonia)	14.2%	13.6%	14.2%	15.6%	13.7%	14.0%	17.7%	17.8%	17.7%	16.1%
Readmission Rate (COPD)	7.2%	8.5%	8.9%	6.8%	8.7%	9.5%	6.8%	8.6%	8.9%	9.0%

Note: Data is reported by provider number and may include multi-campus hospitals reporting under a single provider number, N/A = Not Applicable

Sources: 1. Best Care Report 2. Definitive Healthcare

9.6.V10.MichErie.515



VISN 10: MichErie Market — Ann Arbor-Michigan

Quality & Satisfaction ► Awards and Recognition of Top Five Largest Community Hospitals* – Ann Arbor-Michigan Area

Commercial Hospital Name	University of Michigan Hospitals – Michigan Medicine	ProMedica Toledo Hospital	St. Joseph Mercy Ann Arbor Hospital	Henry Ford Allegiance Health	Mercy Health – St. Vincent Medical Center
Location	Ann Arbor, MI	Toledo, OH	Ypsilanti, MI	Jackson, MI	Toledo, OH
High Performing Ranked Specialties/Programs	<ul style="list-style-type: none"> Cancer Cardiology & Heart Surgery Diabetes & Endocrinology Ear, Nose & Throat Gastroenterology & GI Surgery Geriatrics Gynecology Nephrology Neurology & Neurosurgery Orthopedics Ophthalmology Pulmonology & Lung Surgery Rehabilitation Rheumatology Urology 	<ul style="list-style-type: none"> Gastroenterology & GI Surgery Neurology & Neurosurgery Pulmonology & Lung Surgery 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A
High Performing Procedures/Conditions	<ul style="list-style-type: none"> Abdominal Aortic Aneurysm Repair Aortic Valve Surgery COPD Colon Cancer Surgery Heart Bypass Surgery Heart Failure Joint Replacement (Hip and Knee) Lung Cancer Surgery 	<ul style="list-style-type: none"> Abdominal Aortic Aneurysm Repair Aortic Valve Surgery Colon Cancer Surgery Heart Bypass Surgery Heart Failure Joint Replacement (Hip and Knee) 	<ul style="list-style-type: none"> COPD Colon Cancer Surgery Heart Bypass Surgery Heart Failure Joint Replacement (Hip and Knee) Lung Cancer Surgery 	<ul style="list-style-type: none"> COPD Heart Failure 	<ul style="list-style-type: none"> Heart Failure
Notable Awards	<ul style="list-style-type: none"> U.S. News & World Report: Regionally Ranked Hospital #1 in Michigan, #1 in Detroit area, Recognized in Southeast Michigan, Honor Roll #5 The Leapfrog Group: Hospital Safety Grade "A" (2019), Top Teaching Hospitals (2018) American Nurses Credentialing Center (ANCC): Magnet Designation (2017) Becker's Hospital Review: Top 100 Hospitals (2019, 2018) Healthgrades: America's 250 Best Hospitals (2019, 2018), America's 100 Best Hospitals for Cardiac Care Award (2019), America's 50 Best Hospitals for Cardiac Surgery Award (2017) 	<ul style="list-style-type: none"> U.S. News & World Report: Regionally Ranked Hospital #9 in Ohio and Recognized in Lowlands & Plains Healthgrades: America's 50 Best Hospitals (2019, 2018), America's 250 Best Hospitals (2019, 2018, 2017), America's 100 Best Hospitals (2017), America's 50 Best Hospitals for Cardiac Surgery Award (2017) Healthgrades: America's 100 Best Hospitals for Cardiac Care Award (2019, 2018, 2017), Orthopedic Surgery Award (2018) 	<ul style="list-style-type: none"> U.S. News & World Report: Regionally Ranked Hospital #9 in Michigan, #7 in Detroit area, Recognized in Southeast Michigan IBM Watson Health: Nation's 100 Top Hospitals - Major Teaching Hospitals (2019) Healthgrades: America's 100 Best Hospitals (2019), America's 250 Best Hospitals (2019, 2018, 2017), America's 100 Best Hospitals for Cardiac Care Award (2019, 2018, 2017) 	<ul style="list-style-type: none"> The Leapfrog Group: Hospital Safety Grade "A" (2019) Healthgrades: America's 250 Best Hospitals (2018, 2017) 	<ul style="list-style-type: none"> N/A

*As measured by total staffed beds. Excludes rehabilitation, psychiatric, and long term care facilities.

Note: N/A for High Performing Ranked Specialties/Programs and High Performing Procedures/Conditions indicates the hospital did not meet criteria or volume thresholds set by US News and World Report to be eligible for a rating/ranking.

N/A in for Notable Awards indicate the hospital did not list any care or service delivery awards website. Reflects information that was available as of July 29th, 2019.

Sources: 1. US News and World Report Flagship Hospital Rankings 2. Hospital website

9.7.V10.MichErie.506



VISN 10: MichErie Market — Battle Creek

Quality & Satisfaction ▶ Awards and Recognition of Top Five Largest Community Hospitals* – Battle Creek Area

Commercial Hospital Name	Bronson Methodist Hospital	Henry Ford Allegiance Health	Borgess Medical Center	Bronson Battle Creek Hospital	ProMedica Coldwater Regional Hospital
Location	Kalamazoo, MI	Jackson, MI	Kalamazoo, MI	Battle Creek, MI	Coldwater, MI
High Performing Ranked Specialties/Programs	• N/A	• N/A	• N/A	• N/A	• N/A
High Performing Procedures/Conditions	<ul style="list-style-type: none"> Abdominal Aortic Aneurysm Repair Aortic Valve Surgery Colon Cancer Surgery Heart Bypass Surgery Heart Failure Joint Replacement (Hip and Knee) 	<ul style="list-style-type: none"> COPD Heart Failure 	<ul style="list-style-type: none"> COPD Heart Failure Joint Replacement (Hip and Knee) 	• N/A	• N/A
Notable Awards	<ul style="list-style-type: none"> U.S. News & World Report: Regionally Ranked Hospital #9 in Michigan, Recognized in Southwest Michigan American Nurses Credentialing Center (ANCC): Magnet Designation (2018) Healthgrades: America's 50 Best Hospitals for Vascular Surgery Award (2017) 	<ul style="list-style-type: none"> The Leapfrog Group: Hospital Safety Grade "A" (2019) Healthgrades: America's 250 Best Hospitals (2018, 2017) 	<ul style="list-style-type: none"> U.S. News & World Report: Regionally Ranked Hospital #10 in Michigan and Recognized in Southwest Michigan 	<ul style="list-style-type: none"> Healthgrades: America's 100 Best Hospitals for Joint Replacement Award (2018, 2017), Stroke Care Award (2017) 	• N/A

*As measured by total staffed beds. Excludes rehabilitation, psychiatric, and long term care facilities.

Note: N/A for High Performing Ranked Specialties/Programs and High Performing Procedures/Conditions indicates the hospital did not meet criteria or volume thresholds set by US News and World Report to be eligible for a rating/ranking. N/A in for Notable Awards indicate the hospital did not list any care or service delivery awards website. Reflects information that was available as of July 29th, 2019.

Sources: 1. US News and World Report Flagship Hospital Rankings 2. Hospital website

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VISN 10: MichErie Market

Quality & Satisfaction ► Quality of Top Community Hospital Outpatient Services

Hospital Outpatient Quality Reporting Program Overview

- The Hospital Outpatient Quality Reporting Program (Hospital OQR) is a pay for quality data reporting program implemented by the Centers for Medicare & Medicaid Services (CMS) for outpatient hospital services
 - ✓ Mandated by the Tax Relief and Health Care Act of 2006 by the Centers for Medicare & Medicaid Services to promote higher quality and more efficient health care for Medicare beneficiaries through measurement
- Subsection (d) hospitals that meet Hospital OQR Program requirements during a given calendar year receive a full OPPS payment update, also called the Outpatient Department (OPD) fee schedule increase factor, for the upcoming calendar year
- Eligible hospitals that do not participate or participate but fail to meet program requirements receive a two percentage point reduction of their annual payment update (APU) for the applicable payment year
- Hospitals must submit data for 26 quality measures:
 - ✓ 5 Cardiac Care Measures
 - ✓ 3 ED-Throughput Measures
 - ✓ 1 Pain Management Measures
 - ✓ 6 Imaging Efficiency Measures
 - ✓ 1 Stroke Measures
 - ✓ 9 Submitted Via a Web-Based Tool Measures
 - ✓ 1 Outcome Claims-Based Measures
 - ✓ Commercial Market Data & Analysis

For more information, including measure specifications and minimum case count requirements, see [CMS.gov](https://www.cms.gov)



VISN 10: MichErie Market

Quality & Satisfaction ► Quality of Top Community Hospital Outpatient Services, cont.

- In order to better compare outpatient quality between hospitals, the 21 outpatient quality measure were grouped into broader categories
- National outpatient data was also grouped following the same methodology and used as a benchmark comparison

Hospital Outpatient Quality Reporting Groupings			
Acute Myocardial Infarction / Chest Pain Measure Score	<ul style="list-style-type: none"> • OP-2: Fibrinolytic Therapy Received Within 30 Minutes of ED arrival (%) • OP-3: Median Time to Transfer to Another Facility for Acute Coronary Intervention (mins) • OP-5: Median Time to ECG (mins) 	ED - Throughput	<ul style="list-style-type: none"> • OP-18: Median Time from ED Arrival to ED Departure for Discharged ED Patients (mins) • OP-22: Left Without Being Seen (%)
		ED - Volume*	<ul style="list-style-type: none"> • EDV - Emergency Department Volume
Structural (Submitted Via a Web-based Tool)	<ul style="list-style-type: none"> • OP-12: The Ability for Providers with HIT to Receive Laboratory Data Electronically Directly into their ONC-Certified EHR System as Discrete Searchable Data (Y/N) • OP-17: Tracking Clinical Results between Visits (Y/N) • OP-29: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients (%) • OP-30: Colonoscopy Interval for Patients with a History of Adenomatous Polyps – Avoidance of Inappropriate Use (%) • OP-31: Cataracts – Improvement in Patient's Visual Function within 90 days Following Cataract Surgery (survey) • OP-33 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy 	Imaging Efficiency	<ul style="list-style-type: none"> • OP-8: MRI Lumbar Spine for Low Back Pain (%) • OP-9: Mammography Follow-up Rates (%) • OP-10: Abdomen CT-Use of Contrast Material (%) • OP-11: Thorax CT-Use of Contrast Material (%) • OP-13: Cardiac Imaging for Preoperative Risk Assessment for Non-Cardiac Low Risk Surgery (%) • OP-14: Simultaneous Use of Brain Computed Tomography (CT) and Sinus Computed Tomography (CT) (%)
Outcome Claims-Based	<ul style="list-style-type: none"> • OP-32 Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy • OP-35: Admissions and Emergency Department (ED) Visits for Patients Receiving Outpatient Chemotherapy** • OP-36: Hospital Visits after Hospital Outpatient Surgery** 	Stroke	<ul style="list-style-type: none"> • OP-23: Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Received Head CT or MRI Scan Interpretation Within 45 minutes of ED Arrival (%)

This analysis is subjective in nature and is only meant to provide a directional opinion as to the current state of VA and non-VA providers in the market.

*ED volume (EDV) is not a Hospital OQR measure, but OP-18 and OP-22 national data are based on ED volumes.

**The first reporting period for OP-35 and -36 began January 1, 2018 and goes through December 31, 2018, for the CY 2020 payment determination. Data for these 2 measures have not made available by CMS and are not included in this analysis.



VISN 10: MichErie Market — Ann Arbor-Michigan

Quality & Satisfaction ► Key Quality Metrics of Top Five Largest Community Hospitals* – Ann Arbor-Michigan Area

Outpatient Quality Category	Measure Name	Preferred Direction	University Hospital	ProMedica Toledo Hospital	St Joseph Mercy Ann Arbor	Henry Ford Allegiance Health	Mercy Health - St Vincent Medical Center	National Rate
AMI / Chest Pain	OP-2: Fibrinolytic Therapy Received Within 30 Minutes of ED arrival (%)	High	N/A	N/A	N/A	N/A	N/A	59.0%
	OP-3: Median Time to Transfer to Another Facility for Acute Coronary Intervention (mins)	Low	N/A	N/A	N/A	N/A	N/A	62
	OP-5: Median Time to ECG (mins)	Low	N/A	N/A	6	6	5	8
	OP-12: Receive Laboratory Data Electronically Directly as Discrete Searchable Data (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
	OP-17: Tracking Clinical Results between Visits (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Structural (Submitted via a Web-Based Tool)	OP-29: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients (%)	High	95.0%	86.0%	94.0%	97.0%	100.0%	88.0%
	OP-30: Colonoscopy Interval for Patients with a History of Adenomatous Polyps ?	High	99.0%	93.0%	95.0%	82.0%	100.0%	90.0%
	Avoidance of Inappropriate Use (%)							
	OP-31: Cataracts ? Improvement in Patient's Visual Function within 90 days Following Cataract Surgery (survey)	High	N/A	N/A	N/A	N/A	N/A	95
	OP-33: External Beam Radiotherapy for Bone Metastases (%)	High	88.0%	N/A	100.0%	100.0%	85.0%	86.0%
Outcome Claims-Based	OP-32: Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy	Low	13.6%	17.4%	16.1%	12.7%	15.1%	14.8%
	ED – Throughput							
	OP-18: Median Time from ED Arrival to ED Departure for Discharged ED Patients (mins)	Low	280	131	193	184	130	137
	OP-22: Left Without Being Seen (%)	Low	2.0%	1.0%	1.0%	1.0%	1.0%	2.0%
	EDV: Emergency Department Volume	N/A	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	N/A
Imaging Efficiency	OP-8: MRI Lumbar Spine for Low Back Pain (%)	Low	36.2%	29.8%	32.3%	37.7%	51.7%	39.3%
	OP-9: Mammography Follow-up Rates (%)	Low	7.5%	7.6%	6.8%	4.0%	11.9%	8.9%
	OP-10: Abdomen CT-Use of Contrast Material (%)	Low	4.9%	6.9%	6.3%	5.5%	2.6%	7.8%
	OP-11: Thorax CT-Use of Contrast Material (%)	Low	0.1%	0.2%	0.2%	0.1%	0.5%	1.5%
	OP-13: Cardiac Imaging for Preoperative Risk Assessment for Non Cardiac Low Risk Surgery (%)	Low	4.6%	4.2%	4.4%	3.2%	4.9%	4.6%
	OP-14: Simultaneous Use of Brain Computed Tomography (CT) and Sinus Computed Tomography (CT) (%)	Low	1.2%	0.4%	1.2%	0.7%	1.3%	1.1%
	OP-23: Head CT or MRI Scan Results Within 45 minutes of ED Arrival (%)	High	N/A	N/A	74.0%	69.0%	N/A	73.0%

*As measured by total staffed beds **A rate of 8% - 14% is typically ideal for mammography follow-up rates N/A = Not available/reported Green: at/above National Rate



VISN 10: MichErie Market — Battle Creek

Quality & Satisfaction ► Key Quality Metrics of Top Five Largest Community Hospitals* – Battle Creek Area

Outpatient Quality Category	Measure Name	Preferred Direction	Bronson Methodist Hospital	Henry Ford Allegiance Health	Ascension Borgess Hospital	Bronson Battle Creek Hospital	ProMedica Coldwater Regional Hospital	National Rate
AMI / Chest Pain	OP-2: Fibrinolytic Therapy Received Within 30 Minutes of ED arrival (%)	High	N/A	N/A	N/A	N/A	N/A	59.0%
	OP-3: Median Time to Transfer to Another Facility for Acute Coronary Intervention (mins)	Low	N/A	N/A	N/A	43	64	62
	OP-5: Median Time to ECG (mins)	Low	N/A	6	8	9	4	8
	OP-12: Receive Laboratory Data Electronically Directly as Discrete Searchable Data (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
	OP-17: Tracking Clinical Results between Visits (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	N/A
Structural (Submitted Via a Web-Based Tool)	OP-29: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients (%)	High	96.0%	97.0%	100.0%	97.0%	98.0%	88.0%
	OP-30: Colonoscopy Interval for Patients with a History of Adenomatous Polyps ?	High	100.0%	82.0%	100.0%	96.0%	100.0%	90.0%
	Avoidance of Inappropriate Use (%)							
	OP-31: Cataracts ? Improvement in Patient's Visual Function within 90 days Following Cataract Surgery (survey)	High	N/A	N/A	N/A	N/A	95	95
	OP-33: External Beam Radiotherapy for Bone Metastases (%)	High	N/A	100.0%	N/A	N/A	N/A	86.0%
Outcome Claims-Based	OP-32: Facility 7-Day Risk-Standardized Hospital Visit Rate after Outpatient Colonoscopy	Low	14.1%	12.7%	15.7%	15.6%	14.6%	14.8%
ED – Throughput	OP-18: Median Time from ED Arrival to ED Departure for Discharged ED Patients (mins)	Low	190	184	168	151	125	137
	OP-22: Left Without Being Seen (%)	Low	3.0%	1.0%	3.0%	1.0%	1.0%	2.0%
ED – Volume	EDV: Emergency Department Volume	N/A	Very High (60,000+ patients annually)	Very High (60,000+ patients annually)	High (40,000-59,999 patients annually)	High (40,000-59,999 patients annually)	Medium (20,000-39,999 patients annually)	N/A
Imaging Efficiency	OP-8: MRI Lumbar Spine for Low Back Pain (%)	Low	33.7%	37.7%	38.2%	37.2%	40.0%	39.3%
	OP-9: Mammography Follow-up Rates (%)	Low	5.6%	4.0%	11.4%	7.2%	14.5%	8.9%
	OP-10: Abdomen CT-Use of Contrast Material (%)	Low	5.7%	5.5%	3.9%	4.3%	6.0%	7.8%
	OP-11: Thorax CT-Use of Contrast Material (%)	Low	0.0%	0.1%	0.3%	0.5%	0.8%	1.5%
	OP-13: Cardiac Imaging for Preoperative Risk Assessment for Non Cardiac Low Risk Surgery (%)	Low	4.9%	3.2%	4.2%	4.8%	3.1%	4.6%
	OP-14: Simultaneous Use of Brain Computed Tomography (CT) and Sinus Computed Tomography (CT) (%)	Low	0.6%	0.7%	1.0%	0.9%	1.0%	1.1%
	OP-23: Head CT or MRI Scan Results Within 45 minutes of ED Arrival (%)	High	N/A	69.0%	N/A	56.0%	61.0%	73.0%

*As measured by total staffed beds **A rate of 8% - 14% is typically ideal for mammography follow-up rates N/A = Not available/reported Green: at/above National Rate



VISN 10: MichErie Market — Ann Arbor-Michigan

Quality & Satisfaction

Outpatient Procedure Volumes of Top Five Largest Community Hospitals* – Ann Arbor-Michigan Area

Outpatient Quality Category	Procedure Type	University Hospital	ProMedica Toledo Hospital	St Joseph Mercy Ann Arbor	Henry Ford Allegiance Health	Mercy Health - St Vincent Medical Center
OP Surgical Procedure Volume	Gastrointestinal	18,877	8,632	4,894	7,769	2,218
	Eye	4,992	593	1,908	7	2
	Nervous System	390	314	468	136	45
	Musculoskeletal	1,870	658	954	1,531	407
	Skin	32,699	562	420	3,155	1,942
	Genitourinary	7,418	3,908	768	1,101	1,088
	Cardiovascular	2,623	301	19	480	883
	Respiratory	12,728	404	224	719	197
	Other	907	83	303	143	34
Total		82,504	15,455	9,958	15,041	6,816

- Most hospital outpatient procedures (99%) fall into one of eight categories: Cardiovascular, Eye, Gastrointestinal, Genitourinary, Musculoskeletal, Nervous System, Skin, and Other (CMS.gov; green: at/above National Rate)
- Research has suggested higher procedure volumes are associated with lower costs and better quality (Advisory Board).

N/A = Not available/reported

*As measured by total staffed beds



VISN 10: MichErie Market — Battle Creek

Quality & Satisfaction



Outpatient Procedure Volumes of Top Five Largest Community Hospitals* – Battle Creek Area

Outpatient Quality Category	Procedure Type	Bronson Methodist Hospital	Henry Ford Allegiance Health	Ascension Borgess Hospital	Bronson Battle Creek Hospital	ProMedica Coldwater Regional Hospital
OP Surgical Procedure Volume	Gastrointestinal	5,126	7,769	2,922	1,947	1,114
	Eye	1,109	7	424	0	332
	Nervous System	111	136	164	0	0
	Musculoskeletal	2,519	1,531	1,067	509	451
	Skin	2,005	3,155	190	3,313	105
	Genitourinary	1,116	1,101	577	498	178
	Cardiovascular	1,183	480	151	59	20
	Respiratory	288	719	279	27	43
	Other	252	143	127	78	11
	Total	13,709	15,041	5,901	6,431	2,254

- Most hospital outpatient procedures (99%) fall into one of eight categories: Cardiovascular, Eye, Gastrointestinal, Genitourinary, Musculoskeletal, Nervous System, Skin, and Other (CMS.gov; green: at/above National Rate)
- Research has suggested higher procedure volumes are associated with lower costs and better quality (Advisory Board).

N/A = Not available/reported

*As measured by total staffed beds



Facilities



VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Inpatient Campus Snapshot

Facility Name: Ann Arbor-Michigan

Facility Complexity Level (2017): High-1B

FY18 Core Facility Uniques (VAMC only): 53,083

**REAL PROPERTY OVERVIEW**

Acres available	2
Main Patient Care Facility Construction Date	1950
Most Recent Renovation Date (Main Hospital Building)	2002
BGSF (campus total)	947,688 sq. ft
DGSF (direct patient care)	327,917 sq. ft 35.0% of BGSF
Property Size	31 acres 2 acres available**
Annual Operations and Maintenance Cost	\$16,830,939
Total 10-Year Capital Investment*	\$143,074,689
Facilities Conditions Assessment Deficiencies	\$81,887,659 \$1,543/Unique
Seismic Risk	Low Risk
Operational Leases	15 Leases \$6,525,918 total annual cost 230,028 total NUSF

* Sum of Major and Minor Con. and NRM spending

** Provides an indication of any excess or surplus land, not currently in use and with no plans for future expansion needs that could be used for future development.



VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Inpatient Campus and Outpatient Care Locations

Inpatient Campus:

Facility Data – Ann Arbor			
Building Gross Sq. Ft. (campus total)	Annual Operations and Maintenance Cost (per sq. ft.)	Operating Beds (Reported by Field)	
		Acute Beds ¹	Other Beds ²
947,688	\$17.76	99	43

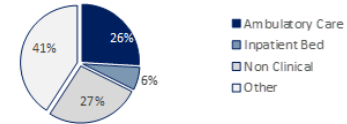
Outpatient Care Locations:

Facility Name ³	Ambulatory Care SF
Ann Arbor VA Medical Center	253,166
Toledo CBOC	33,343
Flint CBOC	11,808
Ann Arbor Neuro Psych	10,585
Jackson CBOC	9,950
Green Road VA Clinic	9,524
CWT/Homeless	3,923
Packard Road VA Clinic	2,179
Modular Office	866

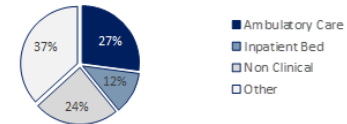
Facility Metrics:

	Ann Arbor	VISN Average	VHA Average
Campus SF	947,688	967,393	828,121
Core Facility Uniques	53,083	40,042	36,243
Campus SF/Core Facility Uniques	18	24	23
Current FCA Backlog	\$81,887,659	\$75,768,821	\$123,141,990
FCA Backlog/Core Facility Uniques	\$1,543	\$1,892	\$3,398

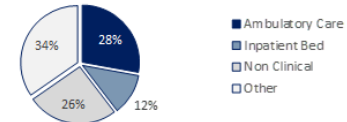
Ann Arbor Space Distribution



VISN 10 Space Distribution



VHA Space Distribution



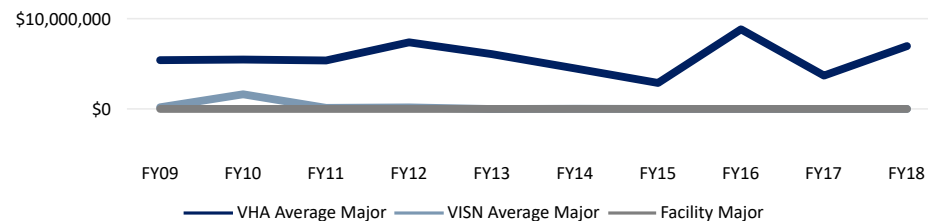
1. Includes Acute Psych, Medicine, and Surgical Beds
 2. Includes Spinal Cord, Blind Rehab, CLC, DR RTP, and Intermediate Beds
 3. Only reflects SF related to VA owned and leased fixed facilities



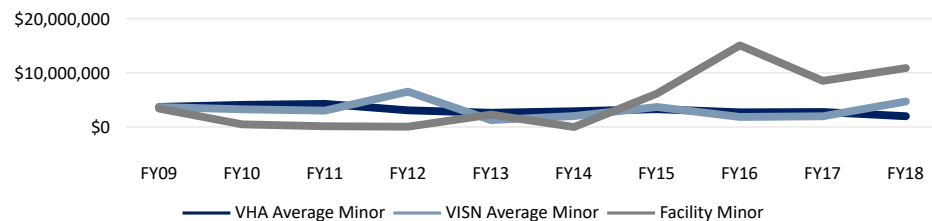
VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Investment – Ann Arbor-Michigan

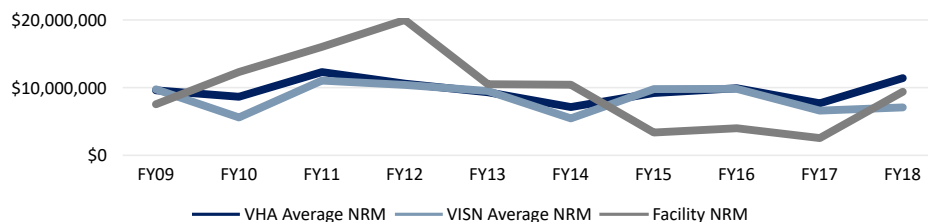
Major Construction Funding



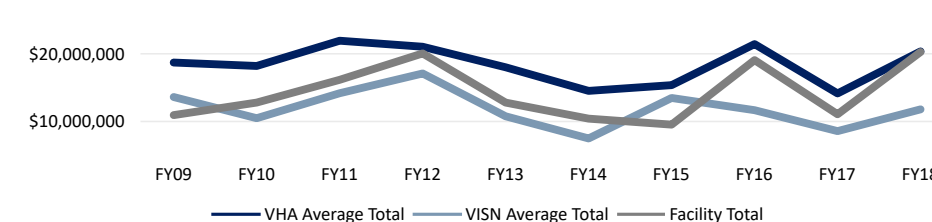
Minor Construction Funding



NRM Funding



Total Construction Funding



	Facility	VISN Average	VHA Average
FCA Backlog/SF**	\$86	\$86	\$139
Current FCA Backlog	\$81,887,659	\$75,768,821	\$123,886,618
Investment/SF**	\$151	\$123	\$155
Total 10-Year Capital Investment*	\$143,074,689	\$119,117,944	\$137,521,745
Owned SF	947,688	968,419	886,486

*Sum of Major and Minor Con. and NRM spending **Total 10-Year Capital Investment and Current FCA Backlog Divided by Owned SF

Source: CAI Buildings and FCA Red Green Reports 9-7-2019; FMS 830 837, Accounts 110, 111, and 162 (Cost Center 8542, BOC 32XX, (less BOC 3222 and BOC 3224))

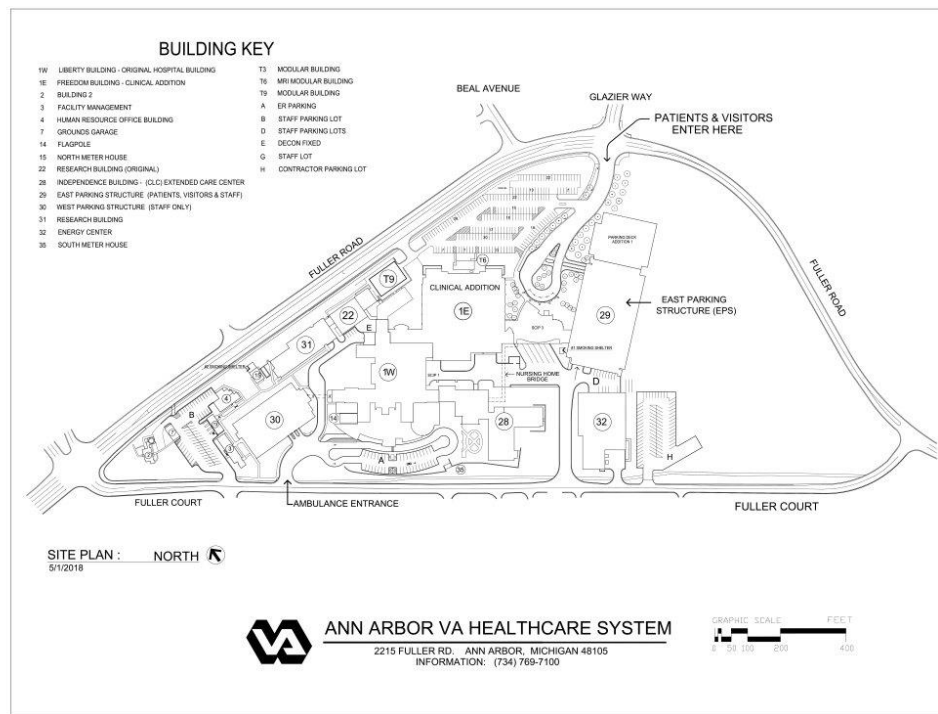
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VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Site Plan

Ann Arbor-Michigan



Source: Site Plan dated May 2018 as provided by facility

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VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Building Inventory (Owned)

Ann Arbor-Michigan												
Function Title	Current Use	Year Built	Building Gross Sq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Cost of FCA Deficiencies*	Full Replacement Cost	Historical Status	Seismic Risk
Total			947,688	253,166	74,751	217,128	307,840	94,803	\$73,098,288	\$707,133,719		
Main Hospital (1W)	Hospital	1950	377,454	117,708	42,346	81,918	84,861	50,621	\$18,729,850	\$286,492,351	Not Historic	Exempt
Clinical Addition (1E)	Hospital	1999	351,663	120,967	7,838	48,953	162,521	11,384	\$18,049,962	\$267,167,963	Not Historic	Exempt
NHCU (28)	Hospital	1983	78,839	14,491	24,567	8,158	21,162	10,461	\$25,219,512	\$53,715,825	Not Historic	Exempt
Research (31)	Laboratories	1995	44,505	0	0	44,100	405	0	\$8,151,926	\$36,627,214	Not Historic	Exempt
Energy Center (32)	Industrial	1995	35,558	0	0	7,734	27,824	0	\$319,742	\$24,652,273	Not Historic	Exempt
Research (22)	Laboratories	1971	17,982	0	0	15,399	2,583	0	\$1,598,344	\$14,493,443	Not Historic	Exempt
Fisher House (xx)	Housing	2019	13,287	0	0	0	0	13,287	\$0	\$9,211,844	Not Historic	Not Listed
Engineering Administration (3)	Office	1950	9,123	0	0	6,507	2,616	0	\$510,667	\$6,324,953	Not Historic	Exempt
Vacant (4)	Office	1950	6,106	0	0	0	0	6,106	\$321,137	\$915,900	Not Historic	Exempt
Home Based Primary Care (2)	Outpatient F...	1950	4,267	0	0	3,279	988	0	\$122,700	\$2,958,300	Not Historic	Exempt
NHCU bridge (10)	Institutional	1999	2,966	0	0	0	2,966	0	\$1	\$2,056,320	Not Historic	Exempt
MRI - Research (T6)	Hospital	2010	1,667	0	0	0	0	1,667	\$2,104	\$250,050	Not Historic	Exempt
Mechanical (15)	Industrial	1950	1,516	0	0	0	1,516	0	\$527	\$1,051,039	Not Historic	Exempt
Vacant (T3)	Office	1994	1,277	0	0	0	0	1,277	\$18,929	\$191,550	Not Historic	Exempt
Engineering Garage (7)	Industrial	1950	1,080	0	0	1,080	0	0	\$52,885	\$748,761	Not Historic	Exempt
Pump house (35)	Industrial	2012	398	0	0	0	398	0	\$0	\$275,932	Not Historic	Not Listed

*Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value ***"Non-Contributing" is a non-contributing element of a landmark or listed district



VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Building Inventory (Leased)

Ann Arbor-Michigan											
Function Title	Current Use	Year Built	Building GrossSq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Lease Termination (Hard)	Year of Activation	Annual Rent
Total			230,028	82,178	0	66,529	68,221	0			\$6,525,918
Toledo CBOC	CBOC	1980	93,936	33,343	0	13,774	46,819	0	Sunday, June 27, 2032	2012	\$2,420,492
Ann Arbor Health Care Research and Devel...	Research		24,780	0	0	24,780	0	0	Friday, January 13, 2023	2013	\$875,943
Modular Office	Office	2016	18,631	866	0	13,431	4,334	0	Thursday, July 15, 2021	2016	\$826,560
National Center for Patient Safety	Office		14,068	0	0	0	14,068	0	Sunday, August 1, 2027	2017	\$503,192
Ann Arbor Warehouse	Warehouse	1990	13,100	0	0	0	0	0	Friday, January 10, 2020	2010	\$143,904
Ann Arbor Satellite Office	Office		12,342	0	0	9,342	3,000	0	Tuesday, September 30, 2025	2017	\$429,387
Flint CBOC	CBOC		11,808	11,808	0	0	0	0	Sunday, May 24, 2020	2010	\$239,556
Ann Arbor Neuro Psych	Other	1980	10,585	10,585	0	0	0	0	Tuesday, August 31, 2027	2017	\$190,848
Jackson CBOC	CBOC		9,950	9,950	0	0	0	0	Thursday, April 30, 2020	2010	\$275,213
Green Road VA Clinic	Other		9,524	9,524	0	0	0	0	Sunday, October 24, 2027	2017	\$279,504
CWT/Homeless	CBOC	1950	3,923	3,923	0	0	0	0	Thursday, September 15, 2022	2012	\$65,776
Ann Arbor Call Center	Office	1970	2,671	0	0	2,671	0	0	Tuesday, October 31, 2023	2013	\$49,140
Toledo Annex	Mental Health	1980	2,531	0	0	2,531	0	0	Monday, October 17, 2022	2012	\$27,675
Packard Road VA Clinic	Mental Health		2,179	2,179	0	0	0	0	Thursday, September 30, 2021	2011	\$65,565
Huron Hills Parking	Parking		0	0	0	0	0	0	Sunday, July 31, 2022	2017	\$133,163



VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Summary of Architectural and Engineering Challenges – Ann Arbor

Infrastructure Category	Major Challenges – Ann Arbor
Site Utilities	<ul style="list-style-type: none">• None noted
Parking	<ul style="list-style-type: none">• Currently parking is strained by approximately 100 spots; currently constructing an addition to a parking structure that will resolve parking challenges. Project is to be completed end of calendar year 2019.
Architecture	<ul style="list-style-type: none">• Community Living Center is in need of a renovation project. 4 Veterans sharing a single bathroom.
Electrical	<ul style="list-style-type: none">• None noted
Plumbing	<ul style="list-style-type: none">• None noted
HVAC	<ul style="list-style-type: none">• Original 1950's building has been retrofitted with modern HVAC systems, small portions of the 8th and 9th floor still require ducted HVAC systems installed.
Medical Gases	<ul style="list-style-type: none">• None noted
Clinical Program Adjacencies	<ul style="list-style-type: none">• Primary Care Space not built to support PACT Model. Veteran in some cases still has to move to the provider
Other Program Adjacencies	<ul style="list-style-type: none">• Due to space constraints, currently leasing two Outpatient Specialty Buildings (i.e. Green and Packard) Would prefer to have on-site. Unable due to the minor program cost restrictions. Requires a Major.
Other	<ul style="list-style-type: none">• Wayfinding has been identified as a major challenge, identified as a top priority on FCA; project has been submitted into SCIP, but not yet approved.



VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Active and Planned Projects — Ann Arbor-Michigan

	Project	SF/ Count	Status	Estimated Cost
Active Minor Construction ¹	Build Out Clinics in Prior Emergency Room/Urgent Care (506-327)	23,000	Construction Awarded 09/27/17	\$9,540,000
	Construct a Clinical and Administrative Building to Eliminate High Cost Leases (506-329)	20,000	Construction Awarded 03/08/19	\$9,141,000
	Construct Clinics over Emergency Room (506-333)	24,000	Planned	\$16,000,000
	Construct Parking Structure (506-331)	50,000	Construction Awarded 10/15/18	\$9,840,000
Active NRMs ¹	Construct Private In-Patient Rooms and Primary Clinics (506-334)	15,600	Planned	\$13,000,000
	Expand 8th Floor Mental Health/Clinical Services (506-330)	21,700	Construction Awarded 04/30/19	\$9,950,000
	Expand Ambulatory Care Clinical Exam Rooms (506-328)	17,500	Construction Awarded 12/17/15	\$8,480,000
	Analyze Air Handler and Correct Deficiencies (506-17-501)		Construction Awarded 07/23/19	\$165,000
	Auditorium HVAC Repairs (506-19-501)		Planned	\$54,467
	Chiller Plant Optimization (506-17-503)	1,000	Design Awarded 07/20/17	\$885,000
	Construct Phlebotomy, Exam Rooms and Complete Corridor Upgrades (23NR9KC01) (506-18-101)	11,500	Design Awarded 08/23/18	\$4,638,000
	Correct USP 800 Compliance Deficiencies (23NR9KA22) (506-19-203)	1,500	Design Awarded 02/13/19	\$795,000
	Enhance Wireless Network Infrastructure (506-18-503)		Construction Awarded 08/20/18	\$500,000
	GE 3.0T MRI Upgrade site prep (506-CSI-121)		Construction Awarded 07/02/19	\$245,000
	GE Signa Artist 1.5T MR System Upgrade (506-CSI-122)		Construction Awarded 07/02/19	\$55,000
	Increase Mental Health Beds (506-20-101)	12,000	Planned	\$6,784,000
	Install Gypboard Ceiling in SPS (506-16-110)		Construction Awarded 02/27/19	\$475,000
	Modernize Main Hospital Finishes (506-20-204)	10,000	Design Awarded 04/26/19	\$928,000
	Modernize Nurse Call System (23NR7KA29) (506-17-502)		Construction Awarded 09/25/17	\$750,000
	Renovate Intensive Care Units (23NR6LA09) (506-16-102)	21,600	Construction Awarded 12/04/18	\$8,672,000
	Renovate Lab Service (506-14-102)	3,500	Construction Awarded 07/23/19	\$900,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

10.8.V10.MichErie.506



VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Active and Planned Projects — Ann Arbor-Michigan, cont.

	Project	SF/ Count	Status	Estimated Cost
Active NRM's ¹	Repair Parking Structures (23NR9KC03) (506-19-103)		Design Awarded 12/18/18	\$4,400,000
	Repair Walks and Drives (506-20-206)	200,000	Planned	\$265,000
	Replace Air Handler 1 and 2 Bldg 31 - Research (506-20-209)	20,000	Design Awarded 05/16/19	\$901,000
	Replace Roofing (506-20-202)		Planned	\$530,000
	Replace/Upgrade Domestic Hot and Cold Water System (23NR9KA02) (506-19-104)		Planned	\$4,400,000
	Site Prep for Angio Room - OR-6 (506-CSI-113)	1,200	Design Awarded 08/20/18	\$1,984,500
	Site Prep for Cardiology EP Labs (506-CSI-114)	1,800	Design Awarded 08/24/18	\$3,598,000
	Site Prep for Fisher House (506-CSI-115)	7,500	Design Awarded 09/19/18	\$840,000
	Site Prep for Radiology Bi-Plane (506-CSI-116)	1,200	Design Awarded 08/20/18	\$631,500
	Site Prep for Radiology GI Room (D316) (506-CSI-117)	1,200	Design Awarded 08/20/18	\$843,500
	Site Prep for Radiology X-Ray (D307) (506-CSI-119)	1,000	Design Awarded 08/30/18	\$132,500
	Site Prep for Radiology X-Ray Pain (D314) (506-CSI-118)	1,000	Design Awarded 08/20/18	\$212,000
	Upgrade 1-West Bldg 1W (506-20-201)	4,207	Design Awarded 10/02/18	\$994,370
	Upgrade Automatic Transfer Switch System (23NR6LA05) (506-16-101)		Design Awarded 09/21/17	\$3,250,000
	Upgrade Basement Building 1W (506-20-102)	12,500	Planned	\$5,407,000
	Upgrade Electrical Switchgear and Distribution (23NR8KA13) (506-18-102)	1,000,000	Design Awarded 09/26/18	\$2,200,000
	Upgrade Elevators (23NR9KC02) (506-19-102)	2,500	Design Awarded 09/24/18	\$3,850,000
	Upgrade Exterior Signage (506-19-202)		Design Awarded 01/25/19	\$440,000
	Upgrade Primary Care, Building 1E (506-20-103)	21,000	Planned	\$9,110,000
	Upgrade Restrooms (506-20-210)	6,000	Design Awarded 07/16/19	\$954,000
	VISN 10 Update Master Record Drawings (IN and MI) - BIM (23NR8KA40) (506-17-601)		Design Awarded 08/13/18	\$5,068,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

10.8.V10.MichErie.506#2



VISN 10: MichErie Market — Ann Arbor-Michigan

Facilities ► Active and Planned Projects — Ann Arbor-Michigan, cont.

	Project	SF/ Count	Status	Estimated Cost
Active Projects Total Estimated Cost (Major, Minor, NRM) ¹	Active Projects Total Estimated Cost (Major, Minor, NRM)			\$151,808,837
Major Leases in Procurement	Ann Arbor - CBOC	36,453	In Procurement	\$1,221,000
SCIP FY2020 Submitted Projects (10-Year-Plan)	Major Construction	1		\$221,791,000
	Minor Construction	2		\$32,000,000
	Minor Leases	4		\$4,378,000
	NRM-Infrastructure Modernization	3		\$18,500,000
	NRM-Sustainment	7		\$49,254,000
	Total Estimated Cost SCIP Projects	17		\$325,923,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

10.8.V10.MichErie.506#3



VISN 10: MichErie Market — Battle Creek

Facilities ► Inpatient Campus Snapshot

Facility Name: Battle Creek

Facility Complexity Level (2017):	Low-3
FY18 Core Facility Uniques (VAMC only):	31,998

**REAL PROPERTY OVERVIEW**

Acres available	20
Main Patient Care Facility Construction Date	1931
Most Recent Renovation Date (Main Hospital Building)	1997
BGSF (campus total)	1,021,975 sq. ft
DGSF (direct patient care)	346,479 sq. ft 34.0% of BGSF
Property Size	213 acres 20 acres available**
Annual Operations and Maintenance Cost	\$13,725,124
Total 10-Year Capital Investment*	\$122,208,091
Facilities Conditions Assessment Deficiencies	\$96,680,437 \$3,021/Unique
Seismic Risk	Low Risk
Operational Leases	6 Leases \$5,976,399 total annual cost 156,944 total NUSF

* Sum of Major and Minor Con. and NRM spending

** Provides an indication of any excess or surplus land, not currently in use and with no plans for future expansion needs that could be used for future development.



VISN 10: MichErie Market — Battle Creek

Facilities ► Inpatient Campus and Outpatient Care Locations

Inpatient
Campus:

Facility Data – Battle Creek			
Building Gross Sq. Ft. (campus total)	Annual Operations and Maintenance Cost (per sq. ft.)	Operating Beds (Reported by Field)	
		Acute Beds ¹	Other Beds ²
1,021,975	\$13.43	21	224

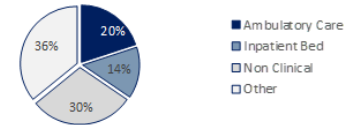
Outpatient
Care
Locations:

Facility Name ³	Ambulatory Care SF
Battle Creek VA Medical Center	179,713
Wyoming Health Care Center	44,576
Grand Rapids Healthcare for Homeless Vets	3,400
Lansing Home Pat Align Care Tm	2,725
Muskegon CBOC	2,200
Benton Harbor CBOC	1,394
Lansing CBOC	766

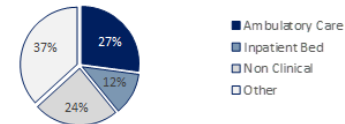
Facility
Metrics:

	Battle Creek	VISN Average	VHA Average
Campus SF	1,021,975	967,393	828,121
Core Facility Uniques	31,998	40,042	36,243
Campus SF/Core Facility Uniques	32	24	23
Current FCA Backlog	\$96,680,437	\$75,768,821	\$123,141,990
FCA Backlog/Core Facility Uniques	\$3,021	\$1,892	\$3,398

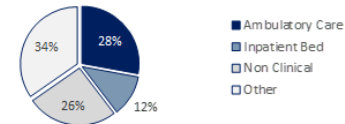
Battle Creek Space Distribution



VISN 10 Space Distribution



VHA Space Distribution



1. Includes Acute Psych, Medicine, and Surgical Beds
2. Includes Spinal Cord, Blind Rehab, CLC, DRRTP, and Intermediate Beds
3. Only reflects SF related to VA owned and leased fixed facilities

Source: CAI Buildings, Floor, Leases, and FCA Red Green Reports 9-7-2019; VSSC Core Uniques Cube; CAPRES CEOSH Report 1-29-2019; Locally Provided GFI

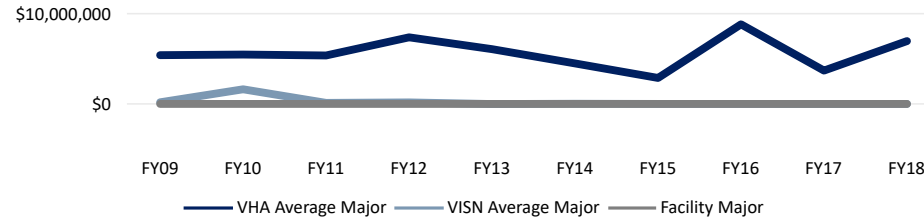
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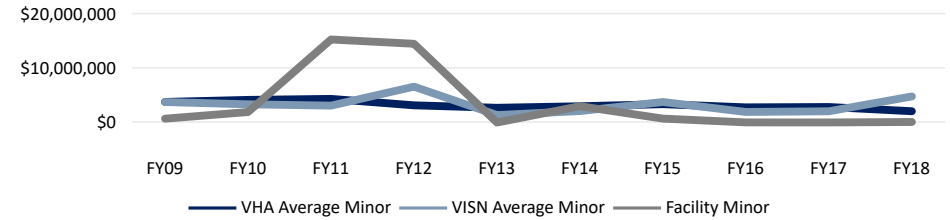
VISN 10: MichErie Market — Battle Creek

Facilities ► Investment – Battle Creek

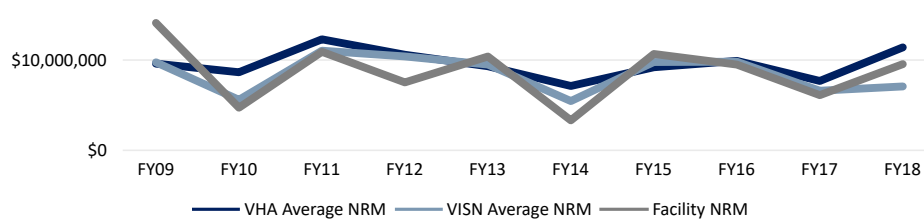
Major Construction Funding



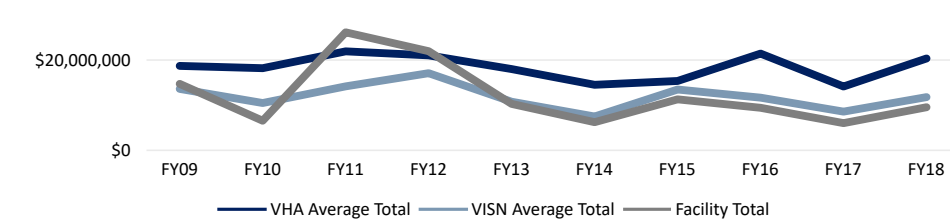
Minor Construction Funding



NRM Funding



Total Construction Funding



	Facility	VISN Average	VHA Average
FCA Backlog/SF**	\$94	\$86	\$139
Current FCA Backlog	\$96,680,437	\$75,768,821	\$123,886,618
Investment/SF**	\$119	\$123	\$155
Total 10-Year Capital Investment*	\$122,208,091	\$119,117,944	\$137,521,745
Owned SF	1,027,353	968,419	886,486

*Sum of Major and Minor Con. and NRM spending **Total 10-Year Capital Investment and Current FCA Backlog Divided by Owned SF

Source: CAI Buildings and FCA Red Green Reports 9-7-2019; FMS 830 837, Accounts 110, 111, and 162 (Cost Center 8542, BOC 32XX, (less BOC 3222 and BOC 3224))

10.3.V10.MichErie.515

Facilities ▶ **Site Plan**

Business and Visiting Hours

Administrative
8:00 a.m. - 4:30 p.m. M-F
(Administrative offices close on federal holidays)

Inpatient Mental Health
10:00 a.m. - 8:00 p.m. M-Su

Visitation for all other programs is 24 hours a day, 7 days a week.

Map Labels: Shafter Circle W, Shafter Circle N, Shafter Circle S, Johnson Drive, Williams Lane, Fox Lane, Dewey Lane, Shafter Lane, Main Entrance, Armstrong Rd., Dickman Rd., To: 64 64, 96, 145, 144, 143, 142, 141, 140, 139, 138, 137, 136, 135, 134, 133, 132, 131, 130, 129, 128, 127, 126, 125, 124, 123, 122, 121, 120, 119, 118, 117, 116, 115, 114, 113, 112, 111, 110, 109, 108, 107, 106, 105, 104, 103, 102, 101, 100, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82, 81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 64, 63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45, 44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.

Legend:

- Yellow and red/pink parking available in all lots
- Covered Walk
- Buildings
- Handicapped Parking
- General Parking

- 1 Director's Office
- 2 Outpatient Services
- Urgent Care
- Patient Advocate
- Veteran Service Officers
- 3 Blind Rehab Service
- 5 Canteen/ Dining Hall
- 6 Auditorium
- 7 Mental Health Clinic
- SUD Clinic
- MHICM
- Wellness & Recovery Center
- Vocational Rehab
- 10 Community & Volunteer
- Public Affairs Office
- 12 Post 9-11 Clinic
- 13 AFGE Union
- Michigan Youth Challenge
- 14 PTSD Clinic & Residential
- Substance Abuse Residential
- Homeless Continuum Care
- 22 Psychosocial Residential
- 24 Human Resources
- Facilities Management
- 39 Inpatient Mental Health
- 82 Chapel
- Compensation & Pension
- Physical Therapy/Prosthetics
- MRI Suite
- 83/84 Community Living Center
- 134 Gymnasium/Pool
- 136 Library / Bowling Alley
- 138 Theatre



VISN 10: MichErie Market — Battle Creek

Facilities ► Building Inventory (Owned)

Battle Creek												
Function Title	Current Use	Year Built	Building Gross Sq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Cost of FCA Deficiencies*	Full Replacement Cost	Historical Status	Seismic Risk
Total			1,027,353	179,713	172,144	322,846	298,890	53,760	\$60,568,898	\$673,261,534		
Main Clinical Building (2)	Outpatient F...	1924	91,968	52,020	0	6,319	27,024	6,605	\$4,238,750	\$64,654,506	Non-Cont. ele. of Landmar...	Exempt
Acute Intensive Psychiatry (39)	Hospital	1931	87,944	0	39,130	12,878	23,895	12,041	\$1,762,006	\$57,631,055	Listed	Exempt
Challenge - Lease/Administration (13)	Office	1940	59,957	4,138	320	8,696	46,803	0	\$4,724,989	\$40,563,095	Listed	Exempt
Warehouse/VISN 11 Laundry (145)	Warehouses	1961	56,562	0	0	56,562	0	0	\$205,711	\$39,413,336	Non-Cont. ele. of Landmar...	Exempt
Continued Treatment/MRI (82)	Hospital	1944	55,571	22,215	10,791	8,055	8,045	6,465	\$3,615,281	\$38,716,451	Listed	Exempt
CLC/Lodgers/Vacant (83)	Hospital	1947	54,622	1,743	18,442	7,006	10,313	17,118	\$777,522	\$33,984,034	Listed	Exempt
Community Living Center (84)	Hospital	1947	54,529	925	40,645	6,197	6,762	0	\$3,673,024	\$32,892,485	Listed	Exempt
Mental Health Outpatient/Canteen Storage (7)	Institutional	1938	53,165	33,436	0	6,681	6,704	6,344	\$449,857	\$34,729,400	Listed	Exempt
RRTP (PTSD and SA) (14)	Hospital	1940	51,377	12,337	33,390	253	5,397	0	\$3,513,577	\$31,851,211	Listed	Exempt
Kitchen & Dining (5)	Institutional	1924	41,904	0	0	35,671	6,233	0	\$2,702,173	\$29,720,564	Listed	Exempt
Connecting Corridors (CC)	Institutional	1924	41,790	0	0	0	41,790	0	\$2,466,024	\$26,307,954	Listed	Exempt
Combined Heating & Power Facility (300)	Industrial	2013	26,185	0	0	0	26,185	0	\$461,418	\$16,484,178	Not Historic	Exempt
Psychosocial RRTP (22)	Institutional	1924	24,598	0	23,036	130	1,432	0	\$1,272,567	\$14,891,307	Listed	Exempt
SPS, Bowling, & Library (136)	Institutional	1961	24,292	1,083	0	13,365	9,844	0	\$866,382	\$15,508,964	Non-Cont. ele. of Landmar...	Exempt
Medical Service Administration/Voluntary Serv...	Office	1924	21,526	1,391	0	18,831	1,304	0	\$1,854,302	\$13,773,998	Listed	Exempt
Recreation/Auditorium (6)	Institutional	1924	19,684	0	0	6,951	12,733	0	\$1,979,920	\$12,446,219	Listed	Exempt
Gymnasium/Pool (134)	Institutional	1959	19,454	17,753	0	0	1,701	0	\$1,539,999	\$12,965,736	Non-Cont. ele. of Landmar...	Exempt
Engineering Storage (73)	Warehouses	1993	16,500	0	0	16,500	0	0	\$264,133	\$10,387,204	Non-Cont. ele. of Landmar...	Exempt
Fiscal & ITOPS (11)	Office	1924	15,534	0	0	11,421	4,113	0	\$1,752,461	\$9,779,080	Listed	Exempt

*Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value **“Non-Contributing” is a non-contributing element of a landmark or listed district



VISN 10: MichErie Market — Battle Creek

Facilities ► Building Inventory (Owned), cont.

Battle Creek												
Function Title	Current Use	Year Built	Building Gross Sq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Cost of FCA Deficiencies*	Full Replacement Cost	Historical Status	Seismic Risk
Contracting, Education & Medical Media (9)	Office	1924	15,497	0	0	11,297	4,200	0	\$1,680,367	\$9,764,292	Listed	Exempt
Transitional Care/Administration (12)	Office	1924	15,434	3,398	0	7,753	4,283	0	\$2,744,381	\$9,840,148	Listed	Exempt
Inpatient Pharmacy (4)	Institutional	1924	14,177	0	0	0	14,177	0	\$1,513,200	\$9,683,919	Listed	Exempt
Engineering, EMS & Human Resources (24)	Office	1924	12,838	0	0	10,783	2,055	0	\$1,856,260	\$8,081,874	Listed	Exempt
Theater & Music Therapy (138)	Institutional	1961	12,066	0	0	8,122	3,944	0	\$668,424	\$7,721,879	Non-Cont. ele. of Landmar...	Exempt
Greenhouse (127)	Institutional	1950	11,046	11,046	0	0	0	0	\$401,152	\$7,401,069	Non-Cont. ele. of Landmar...	Exempt
Main Administration (1)	Office	1932	10,923	0	0	10,142	781	0	\$1,620,717	\$6,876,329	Listed	Exempt
Low Vision Clinic (3)	Outpatient F...	1924	10,367	9,932	0	113	322	0	\$654,386	\$8,354,445	Listed	Exempt
Engineering Shop (26)	Service	1924	10,076	0	0	10,076	0	0	\$355,428	\$6,343,119	Potentially Eligible	Not Listed
Grounds (30)	Service	1924	9,334	0	0	9,334	0	0	\$751,708	\$5,876,010	Listed	Exempt
Planetree/Veterans Transportation (8)	Outpatient F...	1924	9,007	0	0	5,095	3,912	0	\$2,150,418	\$6,643,954	Listed	Exempt
Engineering Shops (28)	Service	1924	8,662	0	0	8,662	0	0	\$547,695	\$5,452,967	Listed	Exempt
Engineering Shops (27)	Service	1924	8,261	0	0	8,261	0	0	\$1,114,888	\$5,200,527	Listed	Exempt
Fire Station (25)	Service	1924	6,437	0	0	6,437	0	0	\$598,948	\$4,052,269	Listed	Exempt
Community Living Center (200)	Hospital	1995	5,858	0	1,012	2,036	2,810	0	\$72,822	\$3,633,739	Non-Cont. ele. of Landmar...	Exempt
Rental Quarters (19)	Housing	1924	5,376	0	0	0	5,376	0	\$114,110	\$3,272,723	Listed	Exempt
Compensated Work Therapy (85)	Hospital	1947	5,040	5,040	0	0	0	0	\$371,621	\$3,443,213	Listed	Exempt
Telephone & ADP (157)	Service	1982	4,383	0	0	4,383	0	0	\$405,786	\$2,759,219	Non-Cont. ele. of Landmar...	Exempt
Engineering Storage (77)	Warehouses	1937	3,171	0	0	3,171	0	0	\$131,834	\$1,996,232	Listed	Exempt
PR RTP House, Michigan Ave. (TRP2)	Housing	1995	2,858	0	2,858	0	0	0	\$0	\$1,725,518	Non-Cont. ele. of Landmar...	Exempt

*Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value ***"Non-Contributing" is a non-contributing element of a landmark or listed district



VISN 10: MichErie Market — Battle Creek

Facilities ► Building Inventory (Owned), cont.

Battle Creek												
Function Title	Current Use	Year Built	Building Gross Sq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Cost of FCA Deficiencies*	Full Replacement Cost	Historical Status	Seismic Risk
Director's Quarters (21D)	Housing	1924	2,667	0	0	0	2,667	0	\$27,267	\$1,610,201	Listed	Exempt
PRRTP House, Capital Ave. (TRP1)	Housing	1995	2,520	0	2,520	0	0	0	\$0	\$1,521,450	Non-Cont. ele. of Landmar...	Exempt
Underground Storage (65)	Warehouses	1928	1,656	1,656	0	0	0	0	\$57,128	\$1,109,557	Listed	Exempt
MRI Suite (82MRI)	Outpatient F...	2013	1,600	1,600	0	0	0	0	\$0	\$1,301,748	Not Historic	Not Listed
Vacant (23)	Housing	1924	1,420	0	0	0	0	1,420	\$51,269	\$213,000	Listed	Exempt
Vacant (29)	Housing	1934	1,420	0	0	0	0	1,420	\$55,559	\$213,000	Listed	Exempt
Vacant - Office (109)	Office	1948	1,274	0	0	0	0	1,274	\$67,474	\$191,100	Listed	Exempt
Recreation (101)	Institutional	1956	1,200	0	0	0	1,200	0	\$65,604	\$755,433	Non-Cont. ele. of Landmar...	Exempt
Emergency Generator (2 & 5) (5G)	Service	2014	1,165	0	0	0	1,165	0	\$0	\$733,400	Non-Cont. ele. of Landmar...	Exempt
Smoking Shelter (135)	Service	1971	1,165	0	0	0	1,165	0	\$6,278	\$733,400	Non-Cont. ele. of Landmar...	Exempt
Vacant (20)	Housing	1924	1,096	0	0	0	1,096	0	\$138,594	\$1,339,462	Listed	Exempt
Vacant (97)	Warehouses	1950	1,073	0	0	0	0	1,073	\$288,612	\$160,950	Listed	Exempt
Vacant (16)	Housing	1924	858	0	0	0	858	0	\$220,285	\$1,051,935	Listed	Exempt
Vacant (17)	Housing	1924	858	0	0	0	858	0	\$1,601,426	\$1,051,935	Listed	Exempt
Electrical Switch Gear (141)	Service	1959	783	0	0	0	783	0	\$1,569	\$492,920	Non-Cont. ele. of Landmar...	Exempt
Vacant (18)	Housing	1924	683	0	0	0	683	0	\$1,616,597	\$941,767	Listed	Exempt
Emergency Generator (4, 7 & 12) (12G)	Service	2014	653	0	0	0	653	0	\$0	\$411,081	Non-Cont. ele. of Landmar...	Exempt
Emergency Generator (3 & 14) (14G)	Service	2014	653	0	0	0	653	0	\$0	\$411,081	Non-Cont. ele. of Landmar...	Exempt
Emergency Generator (82) (82G)	Service	2014	653	0	0	0	653	0	\$0	\$411,081	Non-Cont. ele. of Landmar...	Exempt
Emergency Generator (39) (39G)	Service	2014	653	0	0	0	653	0	\$0	\$411,081	Non-Cont. ele. of Landmar...	Exempt

*Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value ***Non-Contributing” is a non-contributing element of a landmark or listed district



VISN 10: MichErie Market — Battle Creek

Facilities ► Building Inventory (Owned), cont.

Battle Creek												
Function Title	Current Use	Year Built	Building Gross Sq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Cost of FCA Deficiencies*	Full Replacement Cost	Historical Status	Seismic Risk
Emergency Generator (83 & 84) (83G)	Service	2014	653	0	0	0	653	0	\$0	\$411,081	Non-Cont. ele. of Landmar...	Exempt
Pump House (69)	Service	1924	613	0	0	326	287	0	\$32,958	\$385,900	Listed	Exempt
Incinerator Building (154)	Service	1977	490	0	0	490	0	0	\$63,824	\$308,468	Non-Cont. ele. of Landmar...	Exempt
Recreation Pavilion (156)	Institutional	1980	488	0	0	0	488	0	\$22,234	\$307,209	Non-Cont. ele. of Landmar...	Exempt
Storage (51)	Warehouses	1931	459	0	0	0	459	0	\$62,255	\$288,953	Listed	Exempt
Smoking Shelter (163)	Service	1979	300	0	0	0	300	0	\$3,139	\$188,858	Non-Cont. ele. of Landmar...	Exempt
Emergency Generator (8,9,&10) (164)	Service	1979	300	0	0	0	300	0	\$29,715	\$188,858	Non-Cont. ele. of Landmar...	Exempt
Emergency Generator (13) (168)	Service	1979	300	0	0	0	300	0	\$86,110	\$188,858	Non-Cont. ele. of Landmar...	Exempt
Emergency Generator (30) (171)	Service	1979	300	0	0	0	300	0	\$19,462	\$188,858	Non-Cont. ele. of Landmar...	Exempt
Paint Storage Building (158)	Warehouses	1972	267	0	0	267	0	0	\$33,482	\$168,084	Non-Cont. ele. of Landmar...	Exempt
Ballpark Restrooms (144)	Institutional	1978	260	0	0	50	210	0	\$72,090	\$163,677	Non-Cont. ele. of Landmar...	Exempt
Engineering Storage (155)	Warehouses	1966	252	0	0	252	0	0	\$34,866	\$158,641	Non-Cont. ele. of Landmar...	Exempt
Storage Golf Course (172)	Warehouses	1990	240	0	0	0	240	0	\$15,067	\$151,087	Non-Cont. ele. of Landmar...	Exempt
Golf Course Storage (193)	Institutional	1991	150	0	0	150	0	0	\$16,741	\$94,429	Not Historic	Not Listed
Laundry Compressor (173)	Service	1991	130	0	0	130	0	0	\$2,954	\$98,189	Non-Cont. ele. of Landmar...	Exempt
Gas Meter House (151)	Service	1970	128	0	0	0	128	0	\$2,093	\$80,580	Non-Cont. ele. of Landmar...	Exempt

*Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value **“Non-Contributing” is a non-contributing element of a landmark or listed district



VISN 10: MichErie Market — Battle Creek

Facilities ► Building Inventory (Leased)

Battle Creek											
Function Title	Current Use	Year Built	Building GrossSq. Ft.	Outpatient Sq. Ft.	Inpatient	Non-Clinical	Other	Vacant	Lease Termination (Hard)	Year of Activation	Annual Rent
Total			156,944	55,061	0	26,985	74,898	0			\$5,976,399
Wyoming Health Care Center	CBOC	2014	124,454	44,576	0	18,374	61,504	0	Saturday, September 23, 2034	2014	\$5,379,426
Muskegon CBOC	CBOC	2005	9,440	2,200	0	2,982	4,258	0	Saturday, April 30, 2022	2012	\$186,474
Benton Harbor CBOC	CBOC	1961	7,341	1,394	0	2,816	3,131	0	Wednesday, October 31, 2018	2008	\$131,979
Grand Rapids Healthcare for Homeless Vets	Mental Health	1900	7,104	3,400	0	0	3,704	0	Saturday, July 31, 2021	2011	\$128,500
Lansing Home Pat Align Care Tm	Satellite OPC	1964	4,468	2,725	0	866	877	0	Saturday, September 30, 2023	2013	\$57,750
Lansing CBOC	CBOC	1980	4,137	766	0	1,947	1,424	0	Saturday, June 18, 2016	2007	\$92,270



VISN 10: MichErie Market — Battle Creek

Facilities ► Summary of Architectural and Engineering Challenges – Battle Creek

Infrastructure Category	Major Challenges – Battle Creek
Site Utilities	<ul style="list-style-type: none"> Water Distribution, Sanitary Sewer, and Steam Distribution require replacement. Primary Electrical Distribution scheduled for replacement 2020.
Parking	<ul style="list-style-type: none"> None noted
Architecture	<ul style="list-style-type: none"> Buildings a scattered throughout the Medical Center's 210 acre campus, not always placing available space in the best location.
Electrical	<ul style="list-style-type: none"> Although still functional, some electrical systems require replacement as buildings are renovated.
Plumbing	<ul style="list-style-type: none"> Building plumbing systems have been modified throughout the years, and often times require complete replacement as buildings are renovated.
HVAC	<ul style="list-style-type: none"> Most HVAC systems were retrofitted into the various buildings
Medical Gases	<ul style="list-style-type: none"> None noted
Clinical Program Adjacencies	<ul style="list-style-type: none"> Sterile Processing not in the same building as the Procedure Clinic, requiring transportation of supplies by electric carts. Inpatient Pharmacy and Nutrition and Food Service are similar, requiring transportation of supplies by electric carts through a covered walkway. MRI is not located in the same building as the rest of the imaging modalities.
Other Program Adjacencies	<ul style="list-style-type: none"> Warehouse located 1/4 mile from campus, requiring transportation of supplies to all locations by truck. Linen Distribution and Nutrition and Food Service also require truck deliveries to each building.
Other	<ul style="list-style-type: none"> None noted



VISN 10: MichErie Market — Battle Creek

Facilities ► Active and Planned Projects — Battle Creek

	Project	SF/ Count	Status	Estimated Cost
Active NRM's ¹	Upgrade and Expand Security Camera System (515-18-201)		Design Awarded 08/03/18	\$752,100
	Correct Boiler Deficiencies (515-18-502)		Construction Awarded 09/05/18	\$194,000
	Correct Water Distribution Deficiencies for Legionella (23NR8KA41) (515-18-107)		Design Awarded 08/07/18	\$4,950,000
	Develop CHP Safety Device Testing Manual, and Plant Start Up (515-19-205)		Planned	\$435,672
	Improve Patient Information System (515-14-113)		Construction Awarded 03/23/17	\$635,750
	Improve Signage and Wayfinding (515-20-209)		Planned	\$954,000
	Install ADA Access, Various Buildings (23NR5LA10) (515-14-104)		Construction Awarded 07/05/18	\$1,971,000
	Install Central Vacuum Return System (23NR7KB01) (515-16-108)	950,000	Design Awarded 02/24/17	\$3,136,000
	Install Water Monitoring System (515-15-120)		Construction Awarded 09/22/17	\$572,000
	Renovate B 39-2 West for Patient Privacy (515-20-102)	12,730	Planned	\$6,167,000
	Renovate B.8-2 for HAS (515-19-506)	3,400	Planned	\$120,000
	Renovate B83 - 2 for Patient Privacy (23NR5LC13) (515-14-108)	18,160	Construction Awarded 09/19/18	\$5,577,000
	Renovate Common Areas, Various Buildings (515-20-101)	52,800	Planned	\$5,187,635
	Renovate IMH Flooring, Handrails and Acoustics (515-14-110)	34,000	Construction Awarded 08/16/16	\$169,000
	Renovate Mental Health Clinic, B.7-2 (23NR9KA17) (515-20-103)	5,800	Design Awarded 07/23/19	\$2,242,240
	Renovate Outpatient Pharmacy & Urgent Care Building 2 (23NR8KA36) (515-18-109)		Design Awarded 07/26/18	\$5,103,000
	Repair Gutters and Downspouts (23NR9KA16) (515-17-201)		Design Awarded 07/17/17	\$1,380,750
	Replace Ceiling Lifts (515-19-504)		Planned	\$880,665
	Replace CLC Concrete (515-18-203)		Construction Awarded 09/25/18	\$300,000
	Replace Electrical Primary Distribution (23NR5LA27) (515-15-117)		Design Awarded 05/15/17	\$10,233,000
	Replace Fire Alarm, Station Wide (23NR6LA01) (515-14-123)		Design Awarded 12/29/16	\$2,800,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

10.8.V10.MichErie.515



VISN 10: MichErie Market — Battle Creek

Facilities ► Active and Planned Projects — Battle Creek, cont.

	Project	SF/ Count	Status	Estimated Cost
Active NRMs ¹	Replace Roofs, Various Buildings (23NR8KA45) (515-18-108)		Design Awarded 09/11/18	\$2,800,000
	Replace Underground Fuel Storage Tanks (23NR8KA39) (515-18-104)		Design Awarded 07/24/18	\$1,680,000
	Replace Water Heaters Various Buildings (515-13-101)		Construction Awarded 06/21/19	\$665,800
	Replace Windows, Various Buildings (23NR5LA44) (515-14-103)	35,000	Construction Awarded 02/22/19	\$3,929,000
	Sealcoat and Stripe, Various Pavement (515-19-503)		Construction Awarded 08/12/19	\$450,000
	Test and Correct Electrical 2016 (515-16-109)		Design Awarded 03/10/17	\$912,000
	Tuckpoint Various Buildings (23NR8KA43) (515-18-106)		Design Awarded 09/11/18	\$1,045,000
	Update Building Service Equipment and PM Schedules (515-15-114)		Design Awarded 12/29/15	\$150,000
	Upgrade HVAC System, Various Buildings (23NR9KC04) (515-19-101)		Design Awarded 09/25/18	\$6,458,235
	Active Projects Total Estimated Cost (Major, Minor, NRM) ¹			\$71,850,847
Active Projects Total Estimated Cost (Major, Minor, NRM) ¹ SCIP FY2020 Submitted Projects (10-Year-Plan)	Minor Construction	2		\$27,500,000
	Minor Leases	2		\$1,546,000
	NRM-Infrastructure Modernization	8		\$17,628,000
	NRM-Sustainment	6		\$20,051,000
	Total Estimated Cost SCIP Projects	18		\$66,725,000

Note: All active projects have received all levels of approvals and are assumed to be proceeding.

Source: 1. Capital Assets database (PTR as of 9-4-19) 2. Strategic Capital Investment Plan (FY2020 submission) 3. CFM Major Construction Monthly Report, ORP Project Reporting, CAI Proposed (New) Leases (9-7-19)

10.8.V10.MichErie.515#2



Mission



VISN 10: MichErie Market — Ann Arbor-Michigan

Mission ► **Medical Education/Training – Ann Arbor-Michigan**

Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
Ann Arbor VAMC University of Michigan Health Systems	Dental	Dentistry - General Practice Residency 12 Months	4.0
	GME	Addiction psychiatry	1.0
	GME	Allergy and immunology	0.0
	GME	Anesthesiology	3.0
	GME	Cardiovascular disease	4.0
	GME	Chief Resident (IM - Quality and Patient Safety)	1.0
	GME	Chief Resident (IM)	2.0
	GME	Clinical cardiac electrophysiology	1.0
	GME	Dermatology	4.5
	VACAA	Dermatology	1.0
	GME	Endocrinology, diabetes, and metabolism	1.8
	GME	Gastroenterology	5.5
	GME	Geriatric medicine	4.0
	GME	Geriatric psychiatry	0.5
	VACAA	Geriatric psychiatry	0.5
	VACAA	Hematology and Oncology	0.5
	GME	Hematology and Oncology	6.0
	GME	Hospice and palliative medicine (multidisciplinary)	2.3
	GME	Infectious Disease	2.0

*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation.

11.1.V10.MichErie.506



VISN 10: MichErie Market — Ann Arbor-Michigan

Mission ► **Medical Education/Training – Ann Arbor-Michigan, cont.**

Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
University of Michigan Health Systems	GME	Internal medicine	38.5
	GME	Interventional cardiology	1.0
	GME	Nephrology	2.0
	GME	Neurological surgery	1.0
	GME	Neurology	2.0
	VACAA	Neurology	1.0
	GME	Neuroradiology	1.0
	GME	Nuclear medicine	0.8
	GME	Ophthalmology	6.3
	VACAA	Ophthalmology	3.0
	GME	Orthopaedic surgery	2.0
	GME	Otolaryngology	2.0
	GME	Pain Medicine	2.5
	GME	Pathology-Anatomic and Clinical	1.8
	GME	Physical medicine and rehabilitation	2.0
	GME	Plastic surgery - integrated	1.3
	GME	Psychiatry	11.4
	GME	Psychosomatic Medicine	0.5
	GME	Pulmonary disease and critical care medicine	2.3

*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation.

11.1.V10.MichErie.506#2



VISN 10: MichErie Market — Ann Arbor-Michigan

Mission ► **Medical Education/Training – Ann Arbor-Michigan, cont.**

Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
University of Michigan Health Systems	GME	Radiation oncology	2.0
	GME	Radiology-diagnostic	4.0
	GME	Rheumatology	2.0
	GME	Sleep Medicine	1.0
	GME	Surgery-general	6.0
	GME	Thoracic surgery	1.0
	GME	Thoracic surgery - integrated	0.8
	GME	Urology	3.0
	GME	Vascular and interventional radiology	1.0
	GME	Vascular surgery	0.5
	GME	Vascular surgery - integrated	0.9
University of Michigan School of Dentistry	Dental	Dentistry - Periodontics	0.5
University of Toledo College of Medicine	GME	Internal medicine	2.0
	GME	Neurology	0.5
	GME	Physical medicine and rehabilitation	0.5
	GME	Psychiatry	2.0
Other Training Programs	Advanced Fellows	Advanced Geriatrics (GRECC)	3.3
	Advanced Fellows	Advanced Psychology (MIRECC)	0.9
	Associated Health	Audiology Doctoral Extern (4th Year)	1.0

*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation.

11.1.V10.MichErie.506#3



VISN 10: MichErie Market — Ann Arbor-Michigan

Mission ► **Medical Education/Training – Ann Arbor-Michigan, cont.**

Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
Other Training Programs	Advanced Fellows	Health Services Research	4.9
	Advanced Fellows	National Clinician Scholar	7.3
	Nursing	Nursing - Residency	10.0
	Associated Health	Occupational Therapy	6.0
	Advanced Fellows	Patient Safety	4.3
	Associated Health	Pharmacy Resident	5.0
	Associated Health	Physical Therapy	10.0
	Associated Health	Psychology	18.0
	Advanced Fellows	RWJ Clinical Scholars	1.0
	Associated Health	Social Work	6.0

*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation.

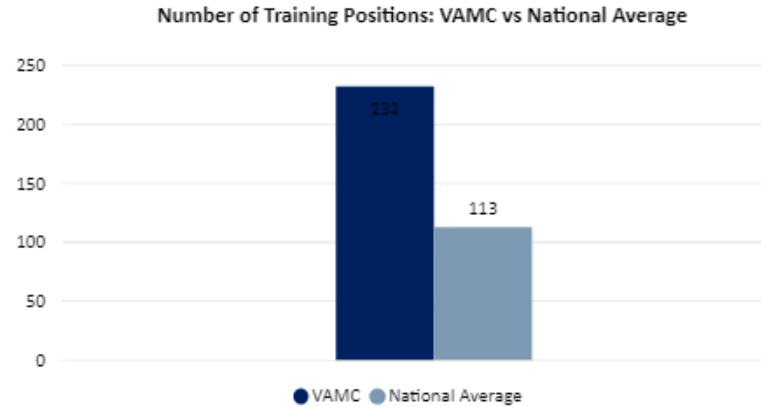
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VISN 10: MichErie Market — Ann Arbor-Michigan

Mission ▶ Medical Education/Training – Ann Arbor-Michigan, cont.

Total VAMC Budget and FTE by Program Type		
Program Type	Budget	AY 2019 Training Positions (FTEs)*
Advanced Fellows	\$1,606,221	21.7
Associated Health	\$1,230,108	46.0
Dental	\$255,145	4.5
GME	\$12,059,834	143.8
Nursing	\$701,541	10.0
VACAA	\$510,289	6.0
Total	\$16,363,138	231.9



Rank: 27 out of 157 training sites (ranked by number of positions)

*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation.

11.1.V10.MichErie.506#5



VISN 10: MichErie Market — Ann Arbor-Michigan

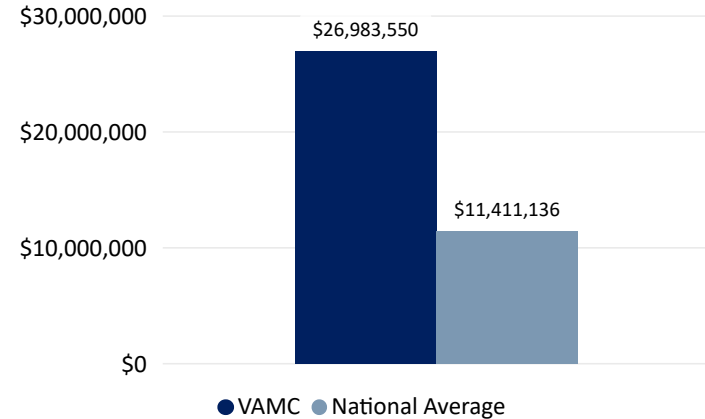
Mission ► Research — Ann Arbor-Michigan

VERA Allocation		
Medical Center	% National 2019 VERA Allocation	Total Research VERA Allocation
(V10) (506) Ann Arbor-Michigan	2.5%	\$26,983,550
National Total	100.0%	\$1,067,382,760

Research dollars for the Quality Enhancement Research Initiative (QUERI) are included in the formula for allocating research support dollars.

Total VAMC Supported Research Projects		
Funding Group	Number of Projects	Reported Cost FY17
Department of Veterans Affairs (VACO)	74	\$11,743,091
National Institutes of Health (NIH)	45	\$9,290,045
Other U.S. Federal Agency	19	\$4,069,901
Academic Institution, Donor, or Government	18	\$1,409,513
Voluntary Agency or Foundation	5	\$277,667
Private Proprietary Company	8	\$193,333
TOTAL	169	\$26,983,550

2019 VERA Allocation vs Average National Allocation*



Rank: **12** out of 96 research sites (ranked by total funding)

*96 VAMCs received VERA Allocation for FY19



VISN 10: MichErie Market — Ann Arbor-Michigan

Mission ► Research – Ann Arbor-Michigan, cont.

Top 5 Projects by Funding \$	
Project Name	FY17 Actual Funding ¹
Cholinergic Mechanisms of Gait Dysfunction In Parkinson's Disease	\$2,069,509
A Pilot Study of Response-Driven Adaptive Radiation therapy for Patients with Locally Advanced non-Small Cell Lung Cancer, UMCC 2015-035	\$1,780,906
Center for Clinical Management Research (CCMRt)	\$1,629,048
Intervening to Reduce Suicide Risk in Veterans with Substance Use Disorders-Phase II	\$1,132,608
The M-Safety Lab: Enhancing Patient Safety Through Cognition & Communication	\$682,911

Top 5 VACO-Funded Projects by \$	
Project Title	FY17 Actual Funding ¹
Center for Clinical Management Research (CCMRt)	\$1,629,048
Facilitating use of the Veterans Crisis Line in High-Risk Patients	\$368,848
Primary Care intervention to Reduce Prescription Opioid Overdoses-Prescription Opioid Safety Trial (POST)	\$326,326
Toward Portable Microchannel Artificial Lungs for Veteran Rehabilitation	\$321,261
Recovery after in hospital Cardiac arrest: late outcomes and Utilization-(ResCU)	\$310,948

1. The project's actual (non-discounted) grant dollars.



VISN 10: MichErie Market — Battle Creek

Mission ► **Medical Education/Training – Battle Creek**

Sponsoring Facility	Program Type	Specialty	AY 2019 Training Positions (FTEs)*
Western Michigan University School of Medicine	GME	Internal medicine	1.0
	VACAA	Internal medicine	2.0
	VACAA	Psychiatry	4.0
	GME	Psychiatry	3.4
Other Training Programs	Associated Health	Optometry Resident	3.0
	Associated Health	Pharmacy Resident	3.0
	Associated Health	Psychology	10.0
	Associated Health	Social Work	5.0

*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation.

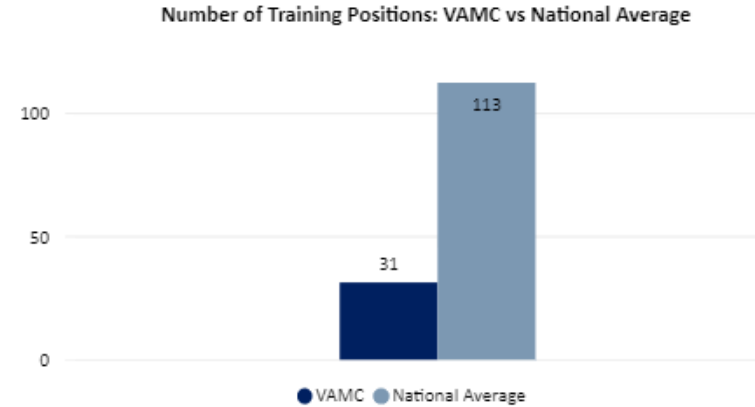
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VISN 10: MichErie Market — Battle Creek

Mission ► **Medical Education/Training – Battle Creek, cont.**

Total VAMC Budget and FTE by Program Type		
Program Type	Budget	AY 2019 Training Positions (FTEs)*
Associated Health	\$689,385	21.0
GME	\$219,917	4.4
VACAA	\$471,249	6.0
Total	\$1,380,551	31.4



Rank: 101 out of 157 training sites (ranked by number of positions)

*Base Positions = Training Positions, GME = Graduate Medical Education, VACAA = Additional GME Slots aligned to The Veterans Access, Choice, and Accountability Act of 2014 (VACAA).

Source: Facility Summary Report provided by Office of Academic Affiliation.

11.1.V10.MichErie.515#2



Cost



VISN 10: MichErie Market

Cost ► Conceptual Cost Analysis for Inpatient Services – Methodology Overview

- The top VAMC inpatient Diagnostic Related Groups (DRGs)¹ by 2018 Veteran demand (discharges) with costs were identified.
 - ✓ VA costs are taken at face value and cost allocations have not been validated.
- For the top VA DRGs, the VA Average Adjusted Total Cost per discharge¹ was compared to the average Medicare reimbursement per discharge and Community Care purchase cost per discharge.
 - ✓ Medicare reimbursement includes Part A hospital plus estimated Part B professional (physician) costs, calculated using a proxy 40% of the Part A costs (note: typically, Part B is based on procedures that vary by type of service and discharge).²
 - ✓ An additional 15% was included as a proxy for Third Party Administration (TPA) costs borne on the VA for processing and administering each commercial inpatient stay.³
 - ✓ For each DRG, as applicable and available, Community Care⁴ data was used to compare cost-to-purchase for Veterans assigned to the treating facility.
- As an additional comparison, the top Community Care⁴ purchased DRGs by volume and the cost to purchase that care are included in the bottom table.

Note: This analysis is conceptual in nature comparing internal VA cost to provide care to Veterans to potential cost to acquire the same care in the market at Medicare rates as well as to existing experience with purchase of Non-VA care, as applicable. It is meant to provide an additional input for the market assessments and will not be used to make any specific recommendations. Given the high-level nature of this assessment, further cost benefit analysis (as defined by the MISSION Act) is necessary to better understand the comparability of VA internal cost to provide care to Veterans compared to rates to acquire the care in the community.

Sources: 1. MCAO Discharge National Data Extract, adjusted by netting out Fixed Indirect overhead as calculated by MCAO 2. 2018 CMS Medicare Standard Analytical Files (SAF) from Definitive Healthcare limited by a 50 mile radius from the parent facility 3. Based on JAMA study 'Administrative Costs Associated With Physician Billing and Insurance-Related Activities at an Academic Health Care System,' February 20, 2018 4. Office of Community Care



VISN 10: MichErie Market — Ann Arbor-Michigan

Cost ▶ Conceptual Cost Analysis for Inpatient Services – Ann Arbor-Michigan

VA Cost and Cost Comparisons by DRG – Ann Arbor VAMC					
Top VA DRGs by Total Discharges FY2018 ¹	Total VA Discharges ¹	Average VA Total Cost per Case ¹	Estimated Cost to Purchase ^{2,*}	Total Community Care Discharges ³	Average Payment per Case ³
(885) PSYCHOSES	252	\$23,665	\$13,888	13	\$15,509
(897) ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	172	\$14,286	\$8,282	N/A	N/A
(881) DEPRESSIVE NEUROSES	154	\$15,143	\$8,686	N/A	N/A
(847) CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W CC	125	\$11,708	\$18,285	N/A	N/A
(292) HEART FAILURE & SHOCK W CC	110	\$21,207	\$11,077	N/A	N/A
(603) CELLULITIS W/O MCC	104	\$14,431	\$8,895	N/A	N/A
(309) CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	95	\$12,423	\$8,119	4	\$6,166
(291) HEART FAILURE & SHOCK W MCC OR PERIPHERAL EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO)	88	\$22,263	\$16,189	6	\$12,427
(392) ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	88	\$9,265	\$7,883	N/A	N/A
(470) MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	81	\$33,425	\$21,019	9	\$17,969
Remaining DRGs	4,310	\$22,831			
Community Care Costs by DRG			In-House vs Community Care	Total Discharges	Total Cost
Top Community Care DRGs by Total Discharges FY2018 ¹	Total Community Care Discharges ²	Average Payment per Case ²	In-House Inpatient Cost ⁴	5,579	\$121,113,571
(885) PSYCHOSES	13	\$15,509	Community Care ³	309	\$7,073,005
(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	12	\$17,296			
(247) PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	10	\$18,547			
(470) MAJOR HIP AND KNEE JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	9	\$17,969			
(027) CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W/O CC/MCC	8	\$22,295			
(853) INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	6	\$60,895			
(460) SPINAL FUSION EXCEPT CERVICAL W/O MCC	6	\$94,749			
(291) HEART FAILURE & SHOCK W MCC OR PERIPHERAL EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO)	6	\$12,427			
(220) CARDIAC VALVE & OTH MAJ CARDIOTHORACIC PROC W/O CARD CATH W CC	5	\$46,781			
(189) PULMONARY EDEMA & RESPIRATORY FAILURE	5	\$7,581			
(775) VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	5	\$6,586			
Remaining DRGs	229	\$21,129			

*Comparing FY2018 VA Average Adjusted Total Cost per Discharge against the CMS average payment/claim per discharge for CY2018. Proxy of 40% of Part A costs to estimate potential Medicare Part B costs plus a proxy of 15% for TPA costs. DRGs with a high Average VA Total Cost potentially tied to low volume and high LOS. Estimated cost to purchase = estimated total cost based on Medicare rates (Part A + Part B) plus a proxy of TPA costs. Medicare claim payments not available for claims/procedures with 10 or fewer discharges due to CMS privacy requirements.

Sources: 1. MCAO Discharge National Data Extract, adjusted by netting out Fixed Indirect overhead as calculated by MCAO 2. 2018 CMS Medicare Standard Analytical Files (SAF) from Definitive Healthcare limited by a 50 mile radius from the parent facility 3. Office of Community Care (Community Care DRGs with 3 or fewer discharges were not included in the VA Cost and Cost Comparison by DRG table)



VISN 10: MichErie Market — Battle Creek

Cost ▶ Conceptual Cost Analysis for Inpatient Services – Battle Creek

VA Cost and Cost Comparisons by DRG – Battle Creek VAMC					
Top VA DRGs by Total Discharges FY2018 ¹	Total VA Discharges ¹	Average VA Total Cost per Case ¹	Estimated Cost to Purchase ^{2*}	Total Community Care Discharges ³	Average Payment per Case ³
(885) PSYCHOSES	344	\$32,137	\$14,955	19	\$9,414
(882) NEUROSES EXCEPT DEPRESSIVE	235	\$25,220	\$12,275	N/A	N/A
(897) ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	233	\$25,176	\$8,293	13	\$5,980
(895) ALCOHOL/DRUG ABUSE OR DEPENDENCE W REHABILITATION THERAPY	107	\$28,542	\$13,216	N/A	N/A
(894) ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	63	\$19,730	\$5,062	N/A	N/A
(057) DEGENERATIVE NERVOUS SYSTEM DISORDERS W/O MCC	37	\$47,649	\$26,918	4	\$8,146
(603) CELLULITIS W/O MCC	34	\$18,920	\$9,237	7	\$6,362
(884) ORGANIC DISTURBANCES & INTELLECTUAL DISABILITY	33	\$38,844	\$22,680	N/A	N/A
(881) DEPRESSIVE NEUROSES	24	\$27,272	\$9,649	N/A	N/A
(189) PULMONARY EDEMA & RESPIRATORY FAILURE	23	\$12,325	\$13,770	17	\$9,675
Remaining DRGs	327	\$18,221			
Community Care Costs by DRG			In-House vs Community Care	Total Discharges	Total Cost
Top Community Care DRGs by Total Discharges FY2018 ³	Total Community Care Discharges ³	Average Payment per Case ³	In-House Inpatient Cost ¹	1,460	\$37,729,166
(871) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W MCC	61	\$12,131	Community Care ³	1,092	\$14,248,192
(291) HEART FAILURE & SHOCK W MCC OR PERIPHERAL EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO)	40	\$10,618			
(190) CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	37	\$8,025			
(247) PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC	30	\$15,561			
(287) CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	26	\$8,620			
(872) SEPTICEMIA OR SEVERE SEPSIS W/O MV >96 HOURS W/O MCC	20	\$7,514			
(885) PSYCHOSES	19	\$9,414			
(065) INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC OR TPA IN 24 HRS	19	\$7,649			
(378) G.I. HEMORRHAGE W CC	18	\$7,402			
(280) ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	17	\$11,346			
(189) PULMONARY EDEMA & RESPIRATORY FAILURE	17	\$9,675			
Remaining DRGs	788	\$16,510			

*Comparing FY2018 VA Average Adjusted Total Cost per Discharge against the CMS average payment/claim per discharge for FY2018. Proxy of 40% of Part A costs to estimate potential Medicare Part B costs plus a proxy of 15% for TPA costs. DRGs with a high Average VA Total Cost potentially tied to low volume and high LOS. Estimated cost to purchase = estimated total cost based on Medicare rates (Part A + Part B) plus a proxy of TPA costs. Medicare claim payments not available for claims/procedures with 10 or fewer discharges due to CMS privacy requirements.

Sources: 1. MCAO Discharge National Data Extract, adjusted by netting out Fixed Indirect overhead as calculated by MCAO 2. 2018 CMS Medicare Standard Analytical Files (SAF) from Definitive Healthcare limited by a 50 mile radius from the parent facility 3. Office of Community Care (Community Care DRGs with 3 or fewer discharges were not included in the VA Cost and Cost Comparison by DRG table)



MAHSO
MARKET AREA HEALTH SYSTEMS OPTIMIZATION

Post-DD&F Data Addendum

Data Compendium - General Information

Purpose

The Data Discovery and Findings (DD&F) data books prepared for each market presented a standardized collection of data used across markets to understand important aspects of each market. Because of the passage of time since the original market assessment phases were conducted, VA has developed an appendix to the DD&F to capture more recent data for key data points. Because the COVID-19 pandemic impacted 2020 and 2021 data, 2019 was the latest fiscal year incorporated for most data elements.

Contents

- Projected Population
- Rurality
- Outpatient Demand
- Outpatient Encounters
- Specialty Care Encounters
- Surgical Cases
- Inpatient Demand (Facility Level)
- Market Demand
- Enrollment Proximity
- Facility
- Building FCA
- Academic Mission
- Research Mission
- Footnotes
- Sources

Additional Information

The Footnotes page provides additional details about tables and individual data elements when required.

The Sources page provides the relevant data cube or program office sourcing information for each of the data elements.

Projected Veteran Enrollee and Eligible Population (Market)

Market	Group	FY19	FY29	10 Year % Growth
(V10) MichErie	Eligible Veterans	187,145	144,212	-22.9%
	Enrollees	109,567	106,313	-3.0%

Market Population Rank (out of 95 markets)

Market	Total Enrollee Rank FY19	Total Enrollee Rank FY29	% Change Rank
(V10) MichErie	36	35	45

County-Based Enrollee Projections

Market	Sector	County	FY19 Enrollees	FY29 Enrollees	10 Year % Change
(V10) MichErie	10-i-1-A	(26031) Cheboygan, MI	1,089	1,022	-6.2%
		(26039) Crawford, MI	612	621	1.5%
		(26047) Emmet, MI	959	969	1.0%
		(26119) Montmorency, MI	627	586	-6.6%
		(26137) Otsego, MI	1,038	959	-7.7%
	10-i-1-B	(26009) Antrim, MI	747	711	-4.8%
		(26019) Benzie, MI	600	579	-3.5%
		(26029) Charlevoix, MI	862	821	-4.8%
		(26055) Grand Traverse, MI	2,601	2,499	-3.9%
		(26079) Kalkaska, MI	635	631	-0.7%
		(26089) Leelanau, MI	469	443	-5.5%
		(26085) Lake, MI	464	450	-3.1%
	10-i-1-C	(26101) Manistee, MI	915	895	-2.3%
		(26105) Mason, MI	875	831	-5.0%
		(26113) Missaukee, MI	449	433	-3.6%
		(26133) Osceola, MI	890	885	-0.6%
		(26165) Wexford, MI	1,241	1,209	-2.6%
	10-i-2-A	(26121) Muskegon, MI	4,728	4,698	-0.6%
		(26127) Oceana, MI	861	896	4.1%
	10-i-2-B	(26067) Ionia, MI	1,258	1,241	-1.3%
		(26107) Mecosta, MI	1,067	1,130	5.9%
		(26117) Montcalm, MI	1,710	1,791	4.7%
		(26123) Newaygo, MI	1,423	1,480	4.0%
	10-i-2-C	(26005) Allegan, MI	2,234	2,210	-1.0%
		(26139) Ottawa, MI	4,817	4,674	-3.0%
	10-i-2-D	(26081) Kent, MI	11,807	11,075	-6.2%
	10-i-2-E	(26037) Clinton, MI	1,552	1,496	-3.6%
		(26045) Eaton, MI	2,674	2,619	-2.0%
		(26057) Gratiot, MI	1,124	1,197	6.6%
		(26065) Ingham, MI	4,490	4,338	-3.4%
	10-i-2-F	(26015) Barry, MI	1,390	1,363	-1.9%
		(26023) Branch, MI	1,208	1,206	-0.2%

County-Based Enrollee Projections

Market	Sector	County	FY19 Enrollees	FY29 Enrollees	10 Year % Change
(V10) MichErie	10-i-2-F	(26025) Calhoun, MI	4,620	4,565	-1.2%
		(26077) Kalamazoo, MI	4,870	4,764	-2.2%
		(26149) Saint Joseph, MI	1,403	1,342	-4.4%
	10-i-3-A	(26059) Hillsdale, MI	1,325	1,230	-7.1%
		(26075) Jackson, MI	4,401	4,101	-6.8%
	10-i-3-B	(26091) Lenawee, MI	2,948	2,940	-0.3%
		(26093) Livingston, MI	3,450	3,319	-3.8%
		(26161) Washtenaw, MI	5,449	5,188	-4.8%
	10-i-3-C	(26115) Monroe, MI	3,886	3,858	-0.7%
		(39051) Fulton, OH	1,202	1,183	-1.5%
		(39095) Lucas, OH	9,332	8,965	-3.9%
		(39123) Ottawa, OH	1,547	1,548	0.0%
		(39173) Wood, OH	2,665	2,544	-4.5%
	10-i-3-E	(39063) Hancock, OH	1,614	1,538	-4.7%
		(39143) Sandusky, OH	1,603	1,578	-1.6%
		(39147) Seneca, OH	1,834	1,694	-7.6%

Projected Veteran Enrollee and Eligible Population (Demographics)

Market	Group	Measure Description	Measure Categories	FY19	FY29	10 Year % Change
(V10) MichErie	Eligible Veterans	Age	<45	37,424	28,204	-24.6%
			45-64	52,116	36,656	-29.7%
			65+ (Combination)	97,605	79,351	-18.7%
			65-84	79,436	65,654	-17.3%
			85-89	11,186	8,409	-24.8%
			90+	6,983	5,288	-24.3%
		Gender	Female	14,538	14,856	2.2%
			Male	172,607	129,356	-25.1%
		Priority	Priority 1-6	151,419	118,266	-21.9%
			Priority 7-8	35,726	25,946	-27.4%
	Enrollees	Age	<45	22,466	19,992	-11.0%
			45-64	29,117	29,732	2.1%
			65+ (Combination)	57,984	56,588	-2.4%
			65-84	49,548	48,527	-2.1%
			85-89	5,193	5,099	-1.8%
			90+	3,243	2,962	-8.7%
		Gender	Female	7,486	10,304	37.6%
			Male	102,081	96,008	-5.9%
		Priority	Priority 1-6	85,014	87,722	3.2%
			Priority 7-8	24,553	18,590	-24.3%

Market Enrollment Rurality (FY19)

Market	Rural Enrollees	Total Enrollees	% Rurality
(V10) MichErie	57,426	107,386	53.5%

County Enrollment Rurality

Market	County	Rural Enrollee	Total Enrollees	% Rurality
(V10) MichErie	Allegan, MI	2,107	2,294	91.8%
	Antrim, MI	789	789	100.0%
	Barry, MI	1,646	1,648	99.9%
	Benzie, MI	635	635	100.0%
	Branch, MI	1,134	1,134	100.0%
	Calhoun, MI	1,282	4,330	29.6%
	Charlevoix, MI	795	795	100.0%
	Cheboygan, MI	1,140	1,140	100.0%
	Clinton, MI	792	1,323	59.9%
	Crawford, MI	681	681	100.0%
	Eaton, MI	1,294	2,346	55.2%
	Emmet, MI	940	940	100.0%
	Fulton, OH	919	1,071	85.8%
	Grand Traverse, MI	2,366	2,366	100.0%
	Gratiot, MI	1,028	1,028	100.0%
	Hancock, OH	1,739	1,739	100.0%
	Hillsdale, MI	1,350	1,350	100.0%
	Ingham, MI	918	4,626	19.8%
	Ionia, MI	1,273	1,273	100.0%
	Jackson, MI	1,838	4,311	42.6%
	Kalamazoo, MI	468	4,977	9.4%
	Kalkaska, MI	619	619	100.0%
	Kent, MI	1,841	11,098	16.6%
	Lake, MI	507	507	100.0%
	Leelanau, MI	618	618	100.0%
	Lenawee, MI	2,774	2,774	100.0%
	Livingston, MI	3,627	3,952	91.8%
	Lucas, OH	302	9,243	3.3%
	Manistee, MI	897	897	100.0%
	Mason, MI	870	870	100.0%
	Mecosta, MI	1,089	1,089	100.0%
	Missaukee, MI	485	485	100.0%

County Enrollment Rurality

Market	County	Rural Enrollee	Total Enrollees	% Rurality
(V10) MichErie	Monroe, MI	1,043	3,627	28.8%
	Montcalm, MI	1,598	1,598	100.0%
	Montmorency, MI	541	541	100.0%
	Muskegon, MI	1,053	4,537	23.2%
	Newaygo, MI	1,592	1,592	100.0%
	Oceana, MI	798	798	100.0%
	Osceola, MI	757	757	100.0%
	Otsego, MI	947	947	100.0%
	Ottawa, MI	608	4,664	13.0%
	Ottawa, OH	1,351	1,429	94.5%
	Saint Joseph, MI	1,334	1,334	100.0%
	Sandusky, OH	1,789	1,789	100.0%
	Seneca, OH	1,553	1,553	100.0%
	Washtenaw, MI	1,328	5,539	24.0%
	Wexford, MI	1,150	1,150	100.0%
	Wood, OH	1,221	2,583	47.3%

FY19 Market Core Uniques

Market Name	Core Uniques
(V10) MichErie	79,284

Core Uniques

Market	Facility	FY15	FY16	FY17	FY18	FY19	5 Year % Change
(V10) MichErie	(V10) (506) Lieutenant Colonel Charles S. Kettles VA Medical Center	53,152	55,363	55,873	52,517	51,129	-3.8%
	(V10) (506GA) Toledo VA Clinic	15,407	15,622	16,099	16,134	16,123	4.6%
	(V10) (506GC) Jackson VA Clinic	3,488	3,757	3,846	4,145	4,178	19.8%
	(V10) (506QA) Packard Road VA Clinic			1,523	7,590	7,745	
	(V10) (506QB) Green Road VA Clinic				7,669	10,905	
	(V10) (515) Battle Creek VA Medical Center	31,437	31,970	31,862	30,169	30,106	-4.2%
	(V10) (515BU) Battle Creek Domiciliary	628	942	971	792	766	22.0%
	(V10) (515BY) Wyoming VA Clinic	18,237	20,120	21,154	21,241	21,538	18.1%
	(V10) (515GA) Muskegon VA Clinic	4,402	4,648	4,940	5,129	5,054	14.8%
	(V10) (515GB) Lansing VA Clinic	4,246	4,405	4,429	4,575	4,486	5.7%
	(V10) (515PA) Battle Creek PR RTP	23	81	71	78	58	152.2%
	(V10) (515QB) Century Avenue VA Clinic			771	879	857	
	(V10) (655GA) Gaylord VA Clinic	3,433	3,638	3,630	3,712	3,746	9.1%
	(V10) (655GB) Colonel Demas T. Craw VA Clinic	5,470	5,221	4,037	4,099	4,218	-22.9%
	(V10) (655GG) Cadillac VA Clinic	2,854	3,143	3,441	3,657	3,825	34.0%
	(V10) (655GH) Cheboygan County VA Clinic	1,376	1,603	1,683	1,833	1,783	29.6%
	(V10) (655GI) Grayling VA Clinic	1,249	1,520	1,546	1,568	1,673	33.9%

Emergency Department (ED) Encounters

Market	Facility	Measure	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (506) Ann Arbor-Michigan	99281	3,546	2,019	749	-78.9%
		99282	7,022	4,169	3,509	-50.0%
		99283	5,899	7,801	8,451	43.3%
		99284	2,032	3,851	4,641	128.4%
		99285	552	1,075	1,546	180.1%
		Total Encounters	19,051	18,915	18,896	-0.8%

ED % Transfers & Admissions

Market Description	Facility	Measure	FY17	FY18	FY19
(V10) MichErie	(V10) (506) Ann Arbor-Michigan	% Transfers	0.7%	0.6%	0.7%
		VA Admission %	16.2%	16.6%	16.5%

Urgent Care Encounters

Market	Facility	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (515) Battle Creek	10,352	9,202	9,861	-4.7%

Outpatient Encounters (FY17-19)

Market	Facility	Clinic Grouping	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (506) Ann Arbor-Michigan	Mental Health	67,431	60,471	59,442	-11.8%
		Primary Care	91,902	84,942	87,173	-5.1%
		Specialty Care	465,538	442,011	447,597	-3.9%
	(V10) (506GA) Toledo	Mental Health	25,570	23,399	21,626	-15.4%
		Primary Care	51,955	46,998	48,162	-7.3%
		Specialty Care	65,335	65,557	66,742	2.2%
	(V10) (506GC) Jackson-Michigan Center	Mental Health	4,250	4,015	3,985	-6.2%
		Primary Care	12,581	12,227	12,805	1.8%
		Specialty Care	1,276	3,334	3,995	213.1%
	(V10) (506QA) Ann Arbor-Packard Road	Mental Health	8,320	15,396	15,600	87.5%
		Primary Care	399	1,920	1,857	365.4%
		Specialty Care	0	10,335	11,373	
	(V10) (506QB) Green Road	Specialty Care	0	11,444	18,577	
	(V10) (515) Battle Creek	Mental Health	53,992	49,898	49,948	-7.5%
		Primary Care	47,027	44,300	45,249	-3.8%
		Specialty Care	211,025	199,587	186,631	-11.6%
	(V10) (515BU) Battle Creek Domiciliary	Mental Health	24,366	22,393	21,828	-10.4%
	(V10) (515BY) Wyoming	Mental Health	25,753	23,420	22,052	-14.4%
		Primary Care	51,081	52,402	59,347	16.2%
		Specialty Care	108,277	109,865	122,197	12.9%
	(V10) (515GA) Muskegon	Mental Health	7,295	8,844	7,533	3.3%
		Primary Care	17,118	19,485	20,111	17.5%
		Specialty Care	6,357	6,713	6,407	0.8%
	(V10) (515GB) Lansing South	Mental Health	6,737	5,724	5,060	-24.9%
		Primary Care	15,563	15,435	16,126	3.6%
		Specialty Care	5,607	5,426	4,973	-11.3%
	(V10) (515PA) Battle Creek PR RTP	Mental Health	495	580	423	-14.5%
	(V10) (515QB) Century Avenue	Mental Health	3,889	6,956	6,719	72.8%
		Primary Care	424	710	0	-100.0%
		Specialty Care				
	(V10) (655GA) Gaylord	Mental Health	4,300	4,781	3,925	-8.7%
		Primary Care	9,958	10,302	8,771	-11.9%
		Specialty Care	4,724	4,942	4,994	5.7%

Outpatient Encounters (FY17-19)						
Market	Facility	Clinic Grouping	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (655GB) Traverse City	Mental Health	931	706	444	-52.3%
		Primary Care	9,405	8,891	9,498	1.0%
		Specialty Care	2,654	2,909	3,427	29.1%
	(V10) (655GG) Cadillac	Mental Health	4,070	5,152	5,609	37.8%
		Primary Care	5,828	6,872	8,251	41.6%
		Specialty Care	5,750	6,052	5,853	1.8%
	(V10) (655GH) Cheboygan County	Mental Health	3,889	3,544	3,348	-13.9%
		Primary Care	3,758	4,224	4,632	23.3%
		Specialty Care	763	1,025	1,092	43.1%
	(V10) (655GI) Grayling	Mental Health	2,395	2,223	2,043	-14.7%
		Primary Care	3,950	3,926	5,085	28.7%
		Specialty Care	1,310	1,213	1,040	-20.6%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (506) Lieutenant Colonel Charles S. Kettles VA Medical Center	Allergy and Immunology	0	44	209	
		Anesthesiology	3,848	4,323	4,344	12.9%
		Audiology / Speech Pathology	13,474	1,973	1,156	-91.4%
		Blind Rehabilitation	488	488	505	3.5%
		Cardiology	34,130	35,516	38,758	13.6%
		Critical Care / Pulmonary Disease	14,650	8,927	8,240	-43.8%
		Dermatology	10,030	4,039	910	-90.9%
		Emergency Medicine	19,840	20,195	20,712	4.4%
		Endocrinology	2,169	2,344	2,402	10.7%
		Gastroenterology	10,931	10,958	11,711	7.1%
		Geriatric Medicine	6,342	6,805	6,455	1.8%
		Hematology-Oncology	11,396	11,734	12,588	10.5%
		Infectious Disease	1,647	1,512	1,709	3.8%
		Nephrology	6,819	6,588	6,535	-4.2%
		Neurological Surgery	2,549	2,153	2,381	-6.6%
		Neurology	4,586	4,465	4,622	0.8%
		Nutrition	1,851	1,712	1,722	-7.0%
		Obstetrics & Gynecology	941	916	914	-2.9%
		Occupational Health	126	102	74	-41.3%
		Ophthalmology	19,272	18,929	18,093	-6.1%
		Optometry	5,567	5,947	6,580	18.2%
		Orthopaedic Surgery	2,303	2,407	2,465	7.0%
		Otolaryngology	5,553	5,357	5,308	-4.4%
		Pain Medicine	4,917	4,400	4,549	-7.5%
		Pathology	161,774	159,939	159,954	-1.1%
		Pharmacy	4,092	4,242	4,918	20.2%
		Physical Medicine & Rehabilitation	26,004	25,313	25,989	-0.1%
		Plastic Surgery	2,607	2,640	2,784	6.8%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (506) Lieutenant Colonel Charles S. Kettles VA Medical Center	Prosthetics/Orthotics	6,915	6,583	6,690	-3.3%
		Radiology	51,601	53,260	56,087	8.7%
		Rheumatology	1,667	1,817	2,246	34.7%
		Surgery	12,116	10,049	10,311	-14.9%
		Thoracic Surgery	1,098	1,080	1,279	16.5%
		Urology	6,501	7,015	6,973	7.3%
		Vascular Surgery	7,734	8,239	7,424	-4.0%
	(V10) (506GA) Toledo VA Clinic	Audiology / Speech Pathology	6,478	6,771	6,364	-1.8%
		Cardiology	1,311	1,035	1,001	-23.6%
		Critical Care / Pulmonary Disease	153	212	197	28.8%
		Dermatology	780	420	459	-41.2%
		Gastroenterology	169	115	100	-40.8%
		Geriatric Medicine	4,845	5,258	4,777	-1.4%
		Nutrition	654	547	571	-12.7%
		Optometry	7,444	7,563	7,559	1.5%
		Otolaryngology	22	9	14	-36.4%
		Pain Medicine	0	0	0	
		Pathology	23,787	23,769	25,381	6.7%
		Pharmacy	0	0	578	
		Physical Medicine & Rehabilitation	13,649	13,663	13,429	-1.6%
		Plastic Surgery	89	33	27	-69.7%
		Prosthetics/Orthotics	652	629	1,206	85.0%
		Radiology	4,861	5,041	4,546	-6.5%
		Urology	47	57	107	127.7%
		Vascular Surgery	394	435	426	8.1%
	(V10) (506GC) Jackson VA Clinic	Audiology / Speech Pathology	0	1,978	2,354	
		Critical Care / Pulmonary Disease	38	32	67	76.3%
		Dermatology	356	342	326	-8.4%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (506GC) Jackson VA Clinic	Nutrition	220	174	236	7.3%
		Optometry	121	98	170	40.5%
		Physical Medicine & Rehabilitation	392	539	515	31.4%
		Prosthetics/Orthotics	130	154	285	119.2%
		Urology	19	17	42	121.1%
	(V10) (506QA) Packard Road VA Clinic	Audiology / Speech Pathology	0	9,834	10,788	
		Physical Medicine & Rehabilitation	0	501	585	
	(V10) (506QB) Green Road VA Clinic	Critical Care / Pulmonary Disease	0	5,921	7,482	
		Dermatology	0	5,089	10,175	
		Podiatry	0	433	468	
		Rheumatology	0	0	16	
		Sleep Medicine	0	1	436	
	(V10) (515) Battle Creek VA Medical Center	Audiology / Speech Pathology	7,069	6,945	7,100	0.4%
		Blind Rehabilitation	159	362	288	81.1%
		Cardiology	3,366	5,614	4,359	29.5%
		Critical Care / Pulmonary Disease	3,867	3,852	3,338	-13.7%
		Dermatology	114	160	205	79.8%
		Emergency Medicine	9,755	8,517	8,210	-15.8%
		Endocrinology	56	101	177	216.1%
		Gastroenterology	25	21	17	-32.0%
		Geriatric Medicine	6,965	8,596	8,482	21.8%
		Infectious Disease	1,132	956	849	-25.0%
		Neurological Surgery	14	18	18	28.6%
		Neurology	1,724	1,848	1,272	-26.2%
		Nutrition	3,258	3,184	3,032	-6.9%
		Occupational Health	512	406	0	-100.0%
		Optometry	9,282	9,894	9,607	3.5%
		Orthopaedic Surgery	17	16	18	5.9%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (515) Battle Creek VA Medical Center	Otolaryngology	28	22	15	-46.4%
		Pain Medicine	1,220	1,085	874	-28.4%
		Pathology	84,176	78,159	72,445	-13.9%
		Pharmacy	9,754	10,103	8,169	-16.2%
		Physical Medicine & Rehabilitation	36,447	29,755	26,970	-26.0%
		Podiatry	7,152	6,754	7,203	0.7%
		Prosthetics/Orthotics	3,136	3,087	3,152	0.5%
		Radiology	19,219	17,675	18,038	-6.1%
		Surgery	1,134	1,132	1,404	23.8%
		Urology	1,444	1,325	1,389	-3.8%
	(V10) (515BY) Wyoming VA Clinic	Audiology / Speech Pathology	8,478	8,573	8,608	1.5%
		Cardiology	1,735	2,926	2,059	18.7%
		Chiropracty	2,206	2,344	2,440	10.6%
		Critical Care / Pulmonary Disease	2,702	2,110	2,668	-1.3%
		Dermatology	642	795	889	38.5%
		Endocrinology	312	337	379	21.5%
		Gastroenterology	1,724	1,570	1,594	-7.5%
		Geriatric Medicine	1,501	1,123	1,578	5.1%
		Infectious Disease	621	504	442	-28.8%
		Neurological Surgery	5	8	23	360.0%
		Neurology	359	401	654	82.2%
		Nutrition	1,450	1,447	1,600	10.3%
		Obstetrics & Gynecology	2	193	222	11000.0%
		Optometry	9,851	10,263	10,840	10.0%
		Orthopaedic Surgery	13	10	13	0.0%
		Otolaryngology	26	10	18	-30.8%
		Pain Medicine	1,975	1,803	1,952	-1.2%
		Pathology	36,560	34,980	44,098	20.6%
		Pharmacy	7,033	6,473	7,161	1.8%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (515BY) Wyoming VA Clinic	Physical Medicine & Rehabilitation	12,753	12,680	13,838	8.5%
		Podiatry	5,231	6,086	7,382	41.1%
		Prosthetics/Orthotics	1,132	2,395	2,920	158.0%
		Radiology	11,188	11,735	10,270	-8.2%
		Rheumatology	29	27	35	20.7%
		Surgery	428	751	209	-51.2%
		Urology	321	321	305	-5.0%
	(V10) (515GA) Muskegon VA Clinic	Audiology / Speech Pathology	71	5	7	-90.1%
		Cardiology	78	486	259	232.1%
		Critical Care / Pulmonary Disease	56	52	56	0.0%
		Dermatology	348	414	416	19.5%
		Geriatric Medicine	3,484	3,246	3,356	-3.7%
		Nutrition	521	441	204	-60.8%
		Optometry	39	249	210	438.5%
		Pain Medicine	26	35	0	-100.0%
		Pharmacy	613	1,059	1,325	116.2%
		Physical Medicine & Rehabilitation	1,112	696	544	-51.1%
		Prosthetics/Orthotics	0	0	0	
		Surgery	6	16	12	100.0%
		Urology	3	14	18	500.0%
	(V10) (515GB) Lansing VA Clinic	Cardiology	42	315	310	638.1%
		Critical Care / Pulmonary Disease	79	85	68	-13.9%
		Dermatology	166	161	135	-18.7%
		Endocrinology	49	57	67	36.7%
		Geriatric Medicine	3,508	3,109	2,956	-15.7%
		Nutrition	234	179	124	-47.0%
		Optometry	46	46	22	-52.2%
		Pharmacy	690	644	632	-8.4%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (515GB) Lansing VA Clinic	Physical Medicine & Rehabilitation	781	817	648	-17.0%
		Prosthetics/Orthotics	0	0	0	
		Surgery	12	13	11	-8.3%
	(V10) (655GA) Gaylord VA Clinic	Audiology / Speech Pathology	124	160	178	43.5%
		Cardiology	18	46	398	2111.1%
		Critical Care / Pulmonary Disease	1,252	1,282	1,202	-4.0%
		Dermatology	155	171	173	11.6%
		Geriatric Medicine	1,648	1,669	1,589	-3.6%
		Infectious Disease	5	16	8	60.0%
		Nutrition	57	55	32	-43.9%
		Optometry	68	141	148	117.6%
		Pharmacy	272	349	418	53.7%
		Physical Medicine & Rehabilitation	196	173	281	43.4%
		Podiatry	469	364	1	-99.8%
		Prosthetics/Orthotics	425	498	521	22.6%
		Sleep Medicine	0	0	4	
		Surgery	35	18	41	17.1%
	(V10) (655GB) Colonel Demas T. Craw VA Clinic	Audiology / Speech Pathology	17	109	137	705.9%
		Cardiology	21	59	417	1885.7%
		Critical Care / Pulmonary Disease	989	1,029	1,135	14.8%
		Dermatology	171	240	202	18.1%
		Endocrinology	30	8	15	-50.0%
		Geriatric Medicine	1	4	4	300.0%
		Nutrition	48	48	29	-39.6%
		Optometry	40	151	87	117.5%
		Pain Medicine	20	34	9	-55.0%
		Pharmacy	546	472	551	0.9%
		Physical Medicine & Rehabilitation	452	293	300	-33.6%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (655GB) Colonel Demas T. Craw VA Clinic	Prosthetics/Orthotics	247	422	522	111.3%
		Surgery	56	33	15	-73.2%
		Urology	16	7	4	-75.0%
	(V10) (655GG) Cadillac VA Clinic	Audiology / Speech Pathology	4,126	4,003	4,364	5.8%
		Cardiology	14	20	17	21.4%
		Dermatology	55	80	82	49.1%
		Endocrinology	19	32	20	5.3%
		Geriatric Medicine	19	16	10	-47.4%
		Infectious Disease	3	22	10	233.3%
		Nutrition	90	65	95	5.6%
		Optometry	71	70	106	49.3%
		Pain Medicine	0	12	17	
		Pharmacy	180	192	182	1.1%
		Physical Medicine & Rehabilitation	352	360	349	-0.9%
		Podiatry	399	630	0	-100.0%
		Prosthetics/Orthotics	406	527	565	39.2%
		Surgery	16	23	36	125.0%
	(V10) (655GH) Cheboygan County VA Clinic	Audiology / Speech Pathology	101	103	96	-5.0%
		Cardiology	18	28	105	483.3%
		Dermatology	52	72	55	5.8%
		Endocrinology	19	12	10	-47.4%
		Nutrition	83	57	77	-7.2%
		Optometry	26	104	84	223.1%
		Pain Medicine	11	19	4	-63.6%
		Pharmacy	39	88	109	179.5%
		Physical Medicine & Rehabilitation	171	230	181	5.8%
		Prosthetics/Orthotics	232	281	354	52.6%
		Surgery	11	31	17	54.5%

Specialty Care Encounters (FY17-19)

Market	Facility	Specialty	FY17	FY18	FY19	3 Year % Change
(V10) MichErie	(V10) (655GI) Grayling VA Clinic	Audiology / Speech Pathology	76	88	77	1.3%
		Cardiology	17	8	9	-47.1%
		Dermatology	83	61	77	-7.2%
		Endocrinology	17	2	14	-17.6%
		Infectious Disease	25	16	7	-72.0%
		Nutrition	91	74	55	-39.6%
		Optometry	55	73	116	110.9%
		Pain Medicine	2	36	1	-50.0%
		Pharmacy	85	86	86	1.2%
		Physical Medicine & Rehabilitation	161	161	145	-9.9%
		Podiatry	239	206	0	-100.0%
		Prosthetics/Orthotics	445	387	427	-4.0%
		Surgery	14	15	26	85.7%

Surgical Cases (FY15-19)

Market	Facility	Setting	FY15	FY16	FY17	FY18	FY19	5 Year % Change
(V10) MichErie	(V10) (506) Lieutenant Colonel Charles S. Kettles VA Medical Center	IP Cases	1,505	1,160	1,387	1,238	1,272	-15.4%
		OP Cases	3,211	2,632	3,173	2,887	3,076	-4.2%

Historical VAMC ADC

Market	Facility	Bed Service	FY15	FY16	FY17	FY18	FY19	5 Year % Change
(V10) MichErie	(V10) (506) Lieutenant Colonel Charles S. Kettles VA Medical Center	CLC	35.4	37.8	39.6	39	37.4	5.6%
		Intermediate						
		Medical	46.7	46	46.2	46.6	44.8	-4.1%
		Mental Health	16.3	14.7	15.9	15.3	15.3	-6.1%
		Neurology	0.9	1.3	0.7	0.7	0.5	-44.4%
		RRTP*	0.1					
		Surgery	21.2	18.7	21.1	17.4	16.5	-22.2%
		Total Med/Surg	68.8	66	68	64.7	61.8	-10.2%
		VAMC Total	120.6	118.5	123.5	119	114.5	-5.1%
	(V10) (515) Battle Creek VA Medical Center	Blind						
		CLC	73.9	73.5	77.5	71	74.6	0.9%
		Intermediate						
		Medical	5.9	4.7	3.2	3.3	2.6	-55.9%
		Mental Health	45.1	45.4	41.9	35.6	41.9	-7.1%
		RRTP*	81	76.8	75.2	72.3	71.6	-11.6%
		Total Med/Surg	5.9	4.7	3.2	3.3	2.6	-55.9%
		VAMC Total	205.9	200.4	197.8	182.2	190.7	-7.4%

FY19 RRTP Beds and ADC

Market	Facility	RRTP Service	FY19 ADC	Operational Beds
(V10) MichErie	Battle Creek	CWT/TR	7.2	9
		DOM SA	19.7	26
		General DOM	34.6	40
		PTSD	16.6	26

FY19 Community Capacity

Market	Facility	Bed Section	Beds	Beds Available	% Occupancy
(V10) MichErie	Ann Arbor	Acute	14,400	1,812	69.4%
		Nursing Home	3,178	232	84.0%
		Psych	904	116	68.5%
		Rehab	547	85	65.6%
	Battle Creek	Acute	1,927	453	56.5%
		Nursing Home	1,206	94	82.6%
		Psych	139	41	50.2%
		Rehab	45	9	60.6%

BY19 Projected Parent Facility ADC (EHCPM)

Market	Parent Facility	Bed Service	Funding Source	FY19 Actual	FY29 Projected	10 Year % Change
(V10) MichErie	Ann Arbor, MI HCS	Acute Inpatient Med/Surg	Community	8.6	10.7	24.9%
			In-House	60.7	52.9	-12.8%
		Acute Inpatient Medicine	Community	3.7	5.5	46.6%
			In-House	41.1	37.5	-8.6%
		Acute Inpatient Mental Health	Community	0.9	1.1	26.7%
			In-House	15.9	15.0	-6.2%
		Acute Inpatient Surgery	Community	4.9	5.3	8.3%
			In-House	19.6	15.4	-21.6%
		Inpatient LTSS	Community	106.7	189.7	77.8%
			In-House	37.1	46.7	26.0%
	Battle Creek, MI HCS	Acute Inpatient Med/Surg	Community	15.8	18.2	15.6%
			In-House	3.6	2.8	-22.4%
		Acute Inpatient Medicine	Community	10.4	12.6	20.8%
			In-House	3.6	2.8	-22.4%
		Acute Inpatient Mental Health	Community	1.6	2.1	30.6%
			In-House	39.2	37.9	-3.2%
		Acute Inpatient Surgery	Community	5.4	5.7	5.5%
		Inpatient LTSS	Community	38.9	65.7	68.7%
			In-House	74.6	91.7	22.9%
		Inpatient Residential Rehab	In-House	70.1	56.0	-20.1%

BY19 Projected Market ADC (EHCPM)

Market	Planning Category Group	Funding Source	FY19 ADC Actual	FY29 ADC Projected	10 Year % Change
(V10) MichErie	Acute Inpatient Med/Surg	Community	29.8	37.4	25.3%
		In-House	38.9	35.1	-9.9%
	Acute Inpatient Medicine	Community	17.0	23.3	37.1%
		In-House	27.1	25.5	-6.1%
	Acute Inpatient Mental Health	Community	3.1	4.5	45.8%
		In-House	41.0	39.5	-3.7%
	Acute Inpatient Surgery	Community	12.8	14.0	9.7%
		In-House	11.8	9.6	-18.6%
	Inpatient Blind Rehab	Community	0.0	0.0	
		In-House	2.0	2.5	27.3%
	Inpatient LTSS	Community	159.4	282.4	77.2%
		In-House	95.8	119.8	25.1%
	Inpatient Residential Rehab	Community	0.0	0.0	
		In-House	58.8	48.6	-17.4%
	Inpatient Spinal Cord Injury	Community	0.0	0.0	
		In-House	1.4	1.6	14.9%

BY18 RRTP Projected Market ADC (3D Model)

Market	Market (BY18)	RRTP Bed Section	FY28 ADC	FY28 Bed Need
(V10) MichErie	10-i	All Bed Sections	51.7	61
		Dom Homeless	14.6	17
		Gen Dom	17.8	21
		PTSD	5.0	6
		Substance Abuse	14.3	17

BY19 Projected Market RVUs (EHCPM)

Market	Planning Category Group	Funding Source	FY19 RVUs Actual	FY29 RVUs Projected	10 Year % Change
(V10) MichErie	Amb LTSS Home and Community Based	In-House	61,042	92,321	51.2%
	Amb Medical Specialties	Community	88,294	184,259	108.7%
		In-House	215,686	335,015	55.3%
	Amb Mental Health Programs	Community	4,371	16,535	278.3%
		In-House	314,706	467,829	48.7%
	Amb Pathology	Community	2,623	7,741	195.2%
		In-House	16,820	24,407	45.1%
	Amb Primary Care	Community	12,497	107,141	757.4%
		In-House	278,781	419,178	50.4%
	Amb Radiology	Community	22,848	43,720	91.4%
		In-House	80,831	116,455	44.1%
	Amb Rehab Therapies	Community	33,725	65,805	95.1%
		In-House	85,840	130,152	51.6%
	Amb Surgical Specialties	Community	75,909	162,864	114.6%
		In-House	94,937	154,934	63.2%
	Specialty Care (Amb Med/Surg/Rehab)	Community	197,927	412,928	108.6%
		In-House	396,463	620,101	56.4%

BY19 Projected Market Dental Procedures (EHCPM)

Market	Funding Source	FY19 Procedures Actual	FY29 Procedures Projected	Projected % Change
(V10) MichErie	Community	12,323	16,445	33.5%
	In-House	64,113	88,987	38.8%

Enrollment Proximity to Current VA Sites by Market

Market	Market (FY18)	Total Enrollees	Primary Care # of Enrollees within 30 Min Drive Time	Primary Care % of Enrollees within 30 Min Drive Time	Secondary Care # of Enrollees within 60 Min Drive Time	Secondary Care % of Enrollees within 60 Min Drive Time
(V10) MichErie	10-i	115,147	72,199	62.7%	51,307	44.6%

Real Property Overview

Market	Facility	Acres Available	Property Size	Main Patient Care Facility Construction Date	Most Recent Renovation Date (Main Hospital Building)	Estimated Annual Operations and Maintenance Cost	FCA Cost	Seismic Risk
(V10) MichErie	Ann Arbor	2.0	31	1950	2002	\$16,830,939	\$85,813,090	Low Risk
	Battle Creek	20.0	213	1931	1997	\$13,725,124	\$90,864,916	Low Risk

Building FCA

Market	Station	Building No	Function Title	FCA Correction Cost
(V10) MichErie	Ann Arbor	10	NHCU bridge	\$1
		15	Mechanical	\$554
		1E	Clinical Addition	\$18,994,589
		1W	Main Hospital	\$19,710,058
		2	Home Based Primary Care	\$129,122
		22	Research	\$1,681,992
		28	NHCU	\$26,539,350
		29	Parking Structure	\$410,820
		3	Engineering Administration	\$537,392
		30	Parking Structure	\$483,176
		31	Research	\$8,578,549
		32	Energy Center	\$336,475
		35	Pump House	\$0
		7	Engineering Garage	\$55,653
		GS1	Guard Shack for Parking Garage Bldg 29	\$8,852
		Site	Site Utilities	\$8,346,505
		SS1	Smoking Shelter in front of Bldg 1E	\$0
		SS2	Smoking Shelter behind Bldg 15	\$0
	Battle Creek	1	Main Administration	\$1,523,228
		10	Medical Service Administration/Voluntary Service	\$1,742,762
		101	Recreation	\$61,658
		109	Vacant - Office	\$63,415
		11	Fiscal & ITOPS	\$1,647,047
		12	Transitional Care/administration	\$2,579,301
		127	Greenhouse	\$377,022
		12G	Emergency Generator (4, 7 & 12)	\$0
		13	Challenge - Lease/Administration	\$4,440,771
		134	Gymnasium/Pool	\$1,447,365
		135	Smoking Shelter	\$5,900
		136	SPD, Bowling, & Library	\$814,268
		138	Theater & Music Therapy	\$628,217
		14	RRTP (PTSD and SA)	\$3,302,229

Building FCA

Market	Station	Building No	Function Title	FCA Correction Cost
(V10) MichErie	Battle Creek	141	Electrical Switch Gear	\$1,475
		144	Ballpark Restrooms	\$67,754
		145	Warehouse/VISN 11/Laundry	\$193,337
		14G	Emergency Generator (3 & 14)	\$0
		151	Gas Meter House	\$1,967
		154	Incinerator Building	\$59,985
		155	Engineering Storage	\$32,769
		156	PMRS Ballpark Shelter	\$20,896
		157	Telephone & ADP	\$381,377
		158	Paint Storage Building	\$31,468
		16	Rental Quarters	\$207,035
		163	Generator Enclosure	\$2,950
		164	Generator Enclosure	\$27,928
		168	Emergency Generator (13)	\$80,931
		17	Rental Quarters	\$1,505,097
		171	Generator Enclosure	\$18,291
		172	Storage Golf Course	\$14,160
		173	Laundry Compressor	\$2,777
		18	Rental Quarters	\$1,519,356
		19	Rental Quarters	\$107,246
		193	Golf Course Storage	\$15,734
		199	Salt Shed	\$3,442
		2	Main Clinical Building	\$3,983,781
		20	Rental Quarters	\$130,257
		200	NHCU	\$68,442
		21D	Director's Quarters	\$25,627
		22	Psychosocial RRTP	\$1,196,020
		23	Rental Quarters Garages	\$48,185
		24	Engineering, EMS & Human Resources	\$1,744,603
		25	Fire Station	\$562,920
		26	Engineering Shop	\$334,048
		27	Engineering Shops	\$1,047,825

Building FCA

Market	Station	Building No	Function Title	FCA Correction Cost
(V10) MichErie	Battle Creek	28	Engineering Shops	\$514,750
		29	Rental Quarters Garages	\$52,217
		3	Low Vision Clinic	\$615,023
		30	Grounds/Vacant	\$706,491
		300	Combined Heating & Power Facility	\$433,663
		39	Acute Intensive Psychiatry	\$1,656,017
		39G	Emergency Generator (39)	\$0
		4	Inpatient Pharmacy	\$1,422,178
		5	Kitchen & Dining	\$2,539,632
		51	Storage	\$58,510
		6	Recreation/Auditorium	\$1,860,824
		65	Underground Storage	\$53,692
		69	Pump House	\$30,976
		7	Mental Health Outpatient/Canteen Storage	\$422,798
		73	Engineering Storage	\$248,245
		77	Engineering Storage	\$123,904
		8	Planetree/Veterans Transportation	\$2,021,067
		82	Continued Treatment/MRI	\$3,397,815
		82 MRI	MRI Suite	\$9,834
		83	CLC/Lodgers/Vacant	\$730,752
		83G	Emergency Generator (83 & 84)	\$0
		84	Community Living Center	\$3,452,084
		85	Compensated Work Therapy	\$349,267
		9	Contracting, Education & Medical Media	\$1,579,290
		97	Engineering Storage	\$271,252
		CC	Connecting Corridors	\$2,317,688
		Site	Site Utilities	\$33,926,083

FY20 Allocated Training Positions

Market	Facility	Training Category	Program Name	Paid	WOC	Total HPTs
(V10) MichErie	Ann Arbor	Advanced Fellow	Advanced Geriatrics (GRECC)	4	0	4
			Advanced Psychology (MIRECC)	2	0	2
			Health Services Research	5	0	5
			National Clinician Scholar	8	0	8
			Patient Safety	5	0	5
		Anesthesiology/Surgery	Anesthesiology	0	129	129
			Anesthesiology-Pain Medicine	0	11	11
			Neurological Surgery	0	13	13
			Ophthalmology	0	21	21
			Orthopaedic Surgery	0	41	41
			Otolaryngology-Head and Neck Surgery	0	24	24
			Plastic Surgery	0	28	28
			Surgery	0	54	54
			Surgery-Thoracic Surgery	0	2	2
			Surgery-Vascular	0	3	3
			Thoracic Surgery-integrated	0	13	13
			Urology	0	21	21
			Vascular Surgery-integrated	0	8	8
		Associated Health	Audiologist Extern	1	0	1
			Audiologist Student	0	1	1
			Occupational Therapist Student/Intern	4	0	4
			Optometrist Student/Extern	0	2	2
			Pharmacist Resident/Fellow	4	0	4
			Pharmacist Student/Extern	0	43	43
			Physical Therapist Assistant	0	4	4
			Physical Therapist Resident	2	0	2
			Physical Therapist Student/Intern	9	1	10
			Psychologist Intern	12	0	12
			Psychologist Resident	7	1	8
			Psychologist Student	0	6	6
			Social Worker Student/Intern	0	1	1
			Speech-Language Pathologist Student/Intern	0	1	1

FY20 Allocated Training Positions

Market	Facility	Training Category		Program Name	Paid	WOC	Total HPTs
(V10) MichErie	Ann Arbor	Combined Physicians		Internal Medicine/Pediatrics	0	36	36
			Dental	Dentist, General Practice	3	0	3
		Medical		Allergy & Immunology	0	9	9
				Dermatology	0	25	25
				Emergency Medicine	0	64	64
				Family Medicine	0	12	12
				Internal Medicine	0	61	61
				Internal Medicine-Cardiovascular Disease	0	25	25
				Internal Medicine-Chief Resident	0	4	4
				Internal Medicine-Chief Resident in Quality and Safety	0	1	1
				Internal Medicine-Clinical Cardiac Electrophysiology	0	7	7
				Internal Medicine-Endocrinology, Diabetes & Metabolism	0	7	7
				Internal Medicine-Gastroenterology	0	22	22
				Internal Medicine-Geriatric Medicine	0	7	7
				Internal Medicine-Hematology & Medical Oncology	0	22	22
				Internal Medicine-Hospice and Palliative Medicine	0	4	4
				Internal Medicine-Infectious Disease	0	4	4
				Internal Medicine-Interventional Cardiology	0	4	4
				Internal Medicine-Nephrology	0	9	9
				Internal Medicine-Pulmonary Disease and Critical Care Medicine	0	17	17
				Internal Medicine-Rheumatology	0	8	8
				Medical Student	0	365	365
				Physical Medicine & Rehabilitation	0	18	18
		Nurse		Registered Nurse Student	0	183	183
		Psychiatry/Neurology		Neurology	0	21	21
				Neurology-Sleep Medicine	0	7	7
				Psychiatry	0	41	41
				Psychiatry-Addiction Psychiatry	0	1	1
				Psychiatry-Consultation-Liaison	0	1	1
				Psychiatry-Geriatric Psychiatry	0	1	1

FY20 Allocated Training Positions

Market	Facility	Training Category	Program Name	Paid	WOC	Total HPTs
(V10) MichErie	Ann Arbor	Radiology/Pathology	Interventional radiology-integrated	0	16	16
			Nuclear Medicine	0	1	1
			Radiology-Diagnostic Radiology	0	32	32
			Radiology-Neuroradiology	0	6	6
			Radiology-Nuclear Radiology	0	1	1
			Radiology-Radiation Oncology	0	12	12
			Radiology-Vascular & Interventional Radiology	0	1	1
	Battle Creek	Associated Health	Audiologist Student	0	2	2
			Blind Rehabilitation Specialist	0	2	2
			Nutritionist/dietitian Student	0	7	7
			Optometrist Resident/Fellow	3	1	4
			Optometrist Student/Extern	0	32	32
			Pharmacist Resident/Fellow	3	0	3
			Pharmacist Student/Extern	1	18	19
			Psychologist Intern	5	0	5
			Psychologist Resident	2	0	2
			Psychologist Student	0	4	4
			Social Worker Student/Intern	3	0	3
		Medical	Internal Medicine	0	74	74
		Nurse	Registered Nurse Student	0	100	100
			RN Doctoral (PhD-ND-DNP-DNS)	0	19	19
		Psychiatry/Neurology	Psychiatry	0	37	37

Academic Ranking (by Total HPTs)

Market	Facility	Total HPTs	National Ranking (out of 154 sites)
(V10) MichErie	Ann Arbor	1,549	22
	Battle Creek	313	95

FY21 Research Funding

Market	Medical Center	Total Funding (VA and Non-VA)	Rank
(V10) MichErie	Ann Arbor	\$24,528,865	15

Footnotes

Market Population Rank (out of 95 markets)

Note: The VISN 02 Finger Lakes and Southern Tier markets merged in 2019 during the market assessments, changing the count of markets assessed from 96 to 95.

County-Based Enrollee Projections

Note: Market totals do not exactly match the values in the Rurality tables due to a difference in data sources.

Note: Counties with fewer than 10 enrollees were reduced to 0 based on privacy guidelines.

Rurality

Note: FY19 enrollees in this data differ from the values shown in the EHCPM (Projected Population). This data is sourced from the Geocoded Enrollee file.

Note: Rural enrollees include enrollees residing in rural and highly rural locations.

Note: Counties with fewer than 10 enrollees were reduced to 0 based on privacy guidelines.

Core Uniques

Note: Core uniques excludes uniques who have only used telephone triage, pharmacy, and lab.

Historical VAMC ADC

Note: *RRTP includes Domiciliary and Compensated Work Therapy/Transitional Residence (CWT/TR) bed services.

FY19 Community Capacity

Note: Although similar data was incorporated in the DD&F, community capacity in this compendium displays the supply of total community beds, occupancy, and beds available among community providers within 60 minutes of each VAMC or HCC. Each community hospital or nursing home which is not currently included in the Veterans Community Care Program or does not meet the minimum quality criteria established in the Section 203 Criteria analysis is excluded. Additionally, providers at or above target occupancy (80% for short-term acute care hospitals, 90% for nursing homes) are assumed to have no bed availability.

BY19 Projected Market RVUs (EHCPM)

Note: Specialty Care includes Medical Specialties, Surgical Specialties, and Rehab Therapies.

OP Encounters & SC Encounters

Note: The stop code mapping used in the data compendium is based on a custom stop code mapping created by VA for the market assessments. The Data Discovery and Findings (DD&F) documents used the Public Data Clinic Group stop code mapping.

Enrollment Proximity to Current VA Sites by Market

Note: Primary care sites include VAMCs, HCCs, MS CBOCs, and CBOCs. Secondary care sites include VA facilities providing ambulatory surgery or acute inpatient services.

Real Property Overview

Note: Acres available provides an indication of any excess or surplus land, not currently in use and has no plans for future expansion needs that could be used for future development.

Building FCA

Note: Project Costs to remediate FCAs vary significantly, from below assessed value to more than 3 times the value.

FY20 Allocated Training Positions

Note: This data displays the number of paid, unpaid (WOC), and total Health Profession Trainees (HPTs) at each facility by training program. This data was acquired from the Office of Academic Affiliations.

Sources

Facility Hierarchy

FY21 Q4 VA Site Tracking (VAST)

Enrollee Projections

BY19 EHCPM

Rurality

Geocoded Enrollee FY19 Q4

Core Uniques

VSSC Uniques Cube

ED/UCC Encounters

VSSC Encounters Cube

ED Transfers & Admissions

Emergency Medicine Management Tool

Surgical Cases

National Surgery Office

Outpatient Encounters

VSSC Encounters Cube

Historical VAMC ADC

MCAO Discharge Cube

Projected Demand

BY19 EHCPM

Projected RRTP Demand

RRTP 3D Model

FY19 RRTP Beds and ADC

RRTP Program Office

FY19 Quality Community Capacity

2019 CMS Cost Reports

Enrollment Proximity to Current VA Sites by Market

FY19 Q4 Enrollment; FY19 Q4 VAST data; VHA OPP Planning Systems Support Group

Real Property Overview

CAI Buildings and FCA Condition Gaps Report (November 2021)

Building FCA

CAI Buildings and FCA Condition Gaps Report (November 2021)

Emergency Preparedness Primary Receiving Centers

Office of Emergency Management

Academic Mission - Allocated Training Positions

Office of Academic Affiliations

Research Mission - Research Funding

Office of Research and Development